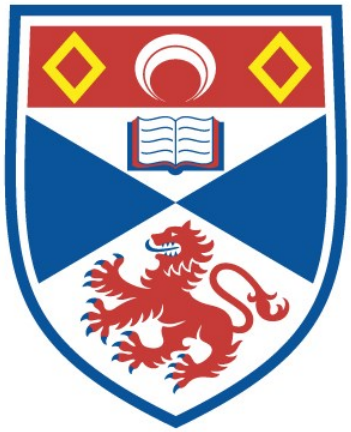
RESIDENTIAL MOBILITY DESIRES AND BEHAVIOUR OVER THE LIFE COURSE : LINKING LIVES THROUGH TIME

Rory Coulter

A Thesis Submitted for the Degree of PhD
at the
University of St Andrews



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Residential mobility desires and behaviour over the life course: Linking lives through time

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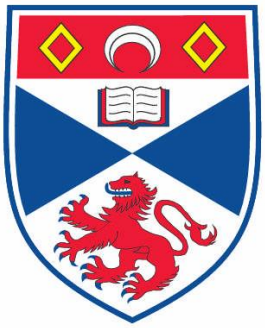

This thesis is submitted in partial fulfilment for the degree of PhD at the University of St Andrews

March, 2013

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I, Rory Coulter, hereby certify that this thesis, which is approximately 69,500 words in length, has been written by me, that it is the record of work carried out by me and that it has not been submitted in any previous application for a higher degree.

I was admitted as a research student in September, 2009 and as a candidate for the degree of PhD in September, 2009; the higher study for which this is a record was carried out in the University of St Andrews between 2009 and 2012.

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Abstract

As residential mobility recursively links individual life courses and the characteristics of places, it is unsurprising that geographers have long sought to understand how people make moving decisions. However, much of our knowledge of residential mobility processes derives from cross-sectional analyses of either mobility decision-making or moving events. Comparatively few studies have linked these separate literatures by analysing how residential (im)mobility decisions unfold over time within particular biographical, household and spatio-temporal contexts. This is problematic, as life course theories suggest that people frequently do not act in accordance with their underlying moving desires. To evaluate the extent to which residential (im)mobility is volitional or the product of constraints therefore requires a longitudinal approach linking moving desires to subsequent moving behaviour.

This thesis develops this longitudinal perspective through four linked empirical studies, which each use British Household Panel Survey data to analyse how the life course context affects the expression and realisation of moving desires. The first study investigates how people make moving decisions in different ways in response to different motivations, triggers and life events. The second study harnesses the concept of 'linked lives', exploring the extent to which the likelihood of realising a desire to move is dependent upon the desires of a person's partner. The third study analyses the biographical dimension of mobility decision-making, investigating how the long-term trajectories of life course careers are associated with particular mobility biographies. The final empirical chapter develops these insights, exploring the duration and abandonment of moving desires. Taken together, these studies test and extend conceptual models of mobility decision-making by empirically engaging with neglected facets of life course theories. Fundamentally, the thesis uncovers how aggregate mobility patterns are produced by the interactions between individual choices and multi-scalar constraints.

Acknowledgements

I always love reading the acknowledgements section of texts and I've been eagerly looking forward to writing my own since starting this project three years ago. Now that it is time to do so, I've become aware that avoiding the trap of simply reeling off an enormous list of names is much more difficult than I had anticipated. This is because I am only now coming to realise how deeply indebted I am to others for the help and support I have received since 2009.

I'd like to start by thanking Maarten for all his encouragement, advice and support over the last few years. Without him, it's extraordinarily unlikely I would have even started this project, let alone seen it through to what I hope is a successful conclusion. I have benefited hugely from Maarten's supervision in numerous ways, ranging from his willingness to share methodological advice through to his extensive experience with the dark arts of academic publishing. I am particularly grateful for how much interest he has always shown in my work and how much time he has always had for my project, even after leaving St Andrews for Delft. In my experience, few people can match Maarten's email response times! In the early days of my project, I also benefited greatly from the supervision provided by Peteke and Paul. Their comments on my initial ideas and draft chapters helped give my work the focus and rigour required in a doctoral thesis. I am also heavily indebted to Allan for taking over my supervision in 2011. His deep knowledge of theory and the migration literature has been invaluable and has taken me in challenging new directions. I would especially like to thank Allan for the thorough commentary he has always provided on my draft manuscripts. His attention to detail and encouragement to always look to the 'big picture' has improved my work immensely.

I particularly enjoyed taking a couple of months break in my PhD studies to work as an RA with Maarten and Bill in spring 2011. Bill's wealth of expertise and infectious enthusiasm has had a long-lasting impact on how I view and conduct my own research. I'd also like to thank everyone else in DGSD at St Andrews for all their encouragement and assistance over the last few years. Every time I have had a question or query there has always been someone

willing to help me out. On a more pragmatic note, both the School of Geography and Geosciences and CHR should also be thanked for funding my doctoral studies.

As geographers, we are of course always aware of the important roles ‘space’ and ‘place’ play in everyday life. From my perspective, it has been a pleasure to share office spaces with so many great colleagues at St Andrews. Sara, Susan and Mel, my longest serving cellmates in Room 601, deserve honourable mentions here for putting up with me for several years. Thanks to them and the hospitality of Dermot Goodwill, working in the Irvine Building has always been productive and enjoyable regardless of the air temperature. At CHR, Tom, Alice and David should be mentioned in despatches for their important contributions to both the academic and social side of life at the Observatory. Thanks are also due to everyone else at CHR for their friendship, encouragement and for turning my PhD into a gastronomic experience. It is well known that research students march on their stomachs, and there has never been a lack of (free!) lunches, cakes, biscuits and sweets at the Observatory to keep me going. I also have fond memories of many illustrious evening ‘Pat-downs’. On the calorie expenditure side, I’ve particularly enjoyed my many runs, hill walks, darts matches and games of tennis with various colleagues at CHR. Outwith St Andrews, thanks are of course also due to all my friends and family who’ve helped me to reach this point through their constant support.

Lastly, I’d like to conclude by acknowledging the debt I owe to the thousands of nameless BHPS participants, many of whom who have completed interviews each year since I was only four years old. Without their co-operation, none of this would have been possible.

Foreword

This thesis consists of a portfolio of four empirical research papers embedded within four critical discussion chapters. All of the four papers have been published or submitted to peer reviewed academic journals. Chapters four and five have already been published in *Environment and Planning A* and *Population, Space and Place* respectively. At the time of writing (February 2013), chapter six is forthcoming in *Housing Studies*, while chapter seven will soon be published in *Environment and Planning A*.

The first three of these research papers have been published or submitted with co-authors. In these co-authored sections, I identified the research questions, designed and conducted the analyses and produced the final manuscript. The co-authors provided research supervision by supplying advice about study design, commenting and assisting with methodological issues and suggesting changes to small portions of text. It is important to note that the contributions provided by co-authors decreased in volume through chapters four to six, with chapter seven consisting of a sole-authored study.

Disclaimer

The data used in this thesis were made available through the ESRC Data Archive. The data were originally collected by the ESRC Research Centre on Micro-Social Change at the University of Essex (now incorporated within the Institute for Social and Economic Research). Neither the original collectors of the data nor the Archive bear any responsibility for the analyses or interpretations presented here.

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Chapter 1

Introduction

1.1 Introduction

It has long been recognised that mobility has always been a fundamental feature of human societies. Yet over the last decade, social scientists have increasingly begun to position mobility as the *defining* characteristic of the twenty-first century world. Many scholars argue that today "all the world seems to be on the move" (Sheller and Urry, 2006: 207), as people, goods, capital, ideas, information and images are all becoming ever more mobile. Seizing upon Sheller and Urry's proclamation that this heralds a 'new mobilities paradigm' for social research, a vibrant literature analysing a huge variety of forms of physical, virtual and cultural movement has developed (King, 2012). Geographers have been particularly active in this 'mobilities turn'. This is because mobility and immobility are fundamentally geographical processes, which need to be analysed to better understand how people shape, and are shaped by, the contexts in which they live (Findlay and Li, 1999).

While the mobilities turn has stimulated interest in a variety of forms of mobility, this thesis seeks to develop the particularly rich tradition of geographical research focusing upon the physical movements of people through space. In this tradition, geographers often argue that physical mobility can be conceptualised as a spectrum of moving behaviours which vary along the axes of time and space (King, 2012; Malmberg, 1997). To help make sense of this spatio-temporal heterogeneity, many scholars use temporal and spatial thresholds to subdivide 'physical mobility' into a range of specific types of moving behaviour. One example of how different types of mobility can be defined using temporal and spatial thresholds is presented in Figure 1.1 (Malmberg, 1997). As with most attempts to categorise mobility behaviour (King, 2012), Malmberg's schema (Figure 1.1) has clear weaknesses. For

instance, some types of mobility do not easily fit into his temporal-permanent dichotomy (such as seasonal moves), while the conflation of distance with the crossing of political/administrative boundaries is problematic (as people can move long distances within the same country or make international moves by travelling very short distances).

Figure 1.1 Temporal and spatial dimensions of human mobility

Permanent migration	Local migration	Interregional migration	International migration
Temporal migration	Commuting	Circulation	Long-distance commuting
	Short-distance mobility		**Long-distance mobility**

Source: Figure 2.2 (p. 25) in Malmberg, G. 1997. Time and space in international migration. In: *International Migration, Immobility and Development: Multidisciplinary Perspectives*. T. Hammar, G. Brochmann, K. Tamas and T. Faist (eds). Oxford: Berg, pp. 21-48.

Nevertheless, Malmberg's broad division of moves into permanent or temporal remains useful. Following Roseman (1971), temporal moves can be defined as 'circulation' moves which are made out and back from a central residential location (for instance commuting or going on holiday). In contrast, permanent moves consist of changes in residential location and hence a change in the 'centre of gravity' of a person's daily life. While permanent moves will trigger a reconfiguration of temporal mobility (for example as people adjust their commuting behaviour after moving house), the reverse relationship does not hold. Henceforth, this thesis focuses solely on permanent residential moves. Mobility and relocation are terms which are used to refer to these permanent changes of residence (although the term permanent will be dropped as it is somewhat problematic). Where temporal mobility is discussed, this is clearly identified (for instance by using terms such as commuting).

Although Malmberg distinguishes several forms of 'migration', much of the existing literature considers short distance moves to be residential mobility,

while defining migration as longer distance moves and moves made across international borders (Clark and Dieleman, 1996; Mulder and Hooimeijer, 1999). Given this terminological confusion, it is important for studies to clarify their use of these terms. For the purposes of this thesis, migration is defined as longer distance moves which result in the total displacement of daily activity spaces (Clark and Dieleman, 1996; Roseman, 1971). In contrast, all moves made over any distance within a single country are defined as residential mobility (hence residential mobility, mobility and relocation are terms which are used interchangeably to denote any type of internal residential move). These definitions are used because migration is arguably becoming increasingly synonymous with long distance and especially international moves (Ellis, 2012), while residential mobility more clearly captures the essence of residential relocation.

While many early scholars focused upon the moves people make within a single country (for instance Ravenstein, 1885), much geographical research is now directed towards the analysis of international moves (Ellis, 2012). Both Ellis (2012) and King (2012) caution that this burgeoning interest in international migration may be having a detrimental effect on our understanding of internal mobility. Following their critiques, there are three reasons why it remains important to study internal mobility. Firstly, it has been well-documented that at the global scale, the majority of moves are made over short distances within a single country (Ellis, 2012; Long, 1992). According to Malmberg (1997: 21-22), this means that “the overwhelming majority of the world’s population remain in the country and region where they were born, throughout their lives”. In fact, the United Nations estimate that in 2010, only 3.1% of the world’s population were living outside their birth country (United Nations, 2009). The fact that international moves remain comparatively rare suggests that academics are becoming increasingly interested in international migration because it is a politically salient issue, rather than because it is quantitatively more important than internal mobility (Ellis, 2012). Nevertheless, observing that most moves are made over short distances within a single country suggests that it remains

important to analyse residential mobility, as local moves may be more relevant to most people's daily lives.

In his seminal study, Peter Rossi (1955) articulated a second reason to study internal residential mobility. Rossi contended that such research is important because the moving behaviour of individuals and households produces the demographic and socio-economic composition of places (Clark and Davies Withers, 2007). This can occur at a very broad scale, for instance as the age-selectivity of migration streams between different types of settlement alters the demographic composition of villages, towns and cities across a country (Dennett and Stillwell, 2010; Plane and Jurjevich, 2009). Equally, selective residential mobility patterns can also configure the finer scale ethnic and socio-economic geography of neighbourhoods (van Ham and Clark, 2009). The links between mobility and the geographic context are not unidirectional however, as 'context' in its broadest sense also influences mobility decision-making (Mulder and Hooimeijer, 1999).

Understanding the geographical patterns of mobility is important for a variety of reasons. In pragmatic terms, such knowledge is important when producing the population projections policymakers require to make informed planning and resource allocation decisions (Dennett and Stillwell, 2010; Rees *et al.*, 2012). This is because as mobility alters the population composition of places, it also affects the current and future geography of demand for services and infrastructure. A detailed awareness of current mobility patterns can, therefore, help local authorities to determine whether it is for instance more pressing to invest in school places or care homes. Analysing mobility patterns is also valuable in less instrumental ways. At the broad scale, understanding urban processes such as segregation and gentrification requires detailed knowledge about the factors influencing people's moving decisions. This is particularly relevant as mobility has traditionally been positioned as both the cause of and solution to many urban problems, such as the spatial concentration of poverty within metropolitan areas (Imbroscio, 2012).

A third reason to study internal residential mobility is to gain a deeper understanding of the operation of housing and labour markets. In an influential

paper, Wheaton (1990) drew on a long tradition of research in labour economics to theorise that residential mobility equilibrates both the housing and labour markets. Wheaton extended the concept of job matching to the housing market, arguing that households move in order to 'match' their housing supply to meet their changing needs. These insights suggest that the housing and labour markets are deeply interlinked, as job changes can trigger residential adjustments (and vice versa) (Clark and Davies Withers, 1999). Understanding how individuals and households make short distance moving decisions is therefore of crucial importance to understand how the housing and labour markets function (Henley, 1998; van der Vlist *et al.*, 2002). This is particularly relevant in the context of the ongoing global recession, as it has been suggested that a vicious spiral of declining mobility rates and weakening labour and housing markets is developing in some Western countries (see Cooke, 2011).

In light of the above discussion, the rest of this chapter elaborates upon how this thesis develops our understanding of internal mobility within the United Kingdom (UK). The next section examines why it is important to conduct a longitudinal analysis which links mobility decision-making to subsequent moving behaviour. The chapter then discusses why it is particularly valuable to focus upon the realisation of moving desires. After presenting the overall objective of the study, the chapter concludes by outlining how the rest of the thesis is structured to fulfil this objective.

1.2 Linking mobility decision-making to actual moving behaviour

1.2.1 Adopting a longitudinal life course perspective

Until recently, many residential mobility studies only analysed moving behaviour at a single point in time. It is arguable that this focus on residential mobility as a discrete 'event' has in part come about because of a pragmatic need for researchers to rely on cross-sectional data collected at a single point in time.

Much of the migration and residential mobility literature therefore consists of cross-sectional analyses of migrants. These range from both aggregate and disaggregate quantitative analyses of the characteristics of movers (for recent examples Dennett and Stillwell, 2010; Finney, 2011; Niedomysl, 2011; Plane and Jurjevich, 2009), to qualitative studies of how individuals make housing choices when relocating (Levy *et al.*, 2008; Munro and Smith, 2008).

This focus on mobility as a discrete and decontextualised event was criticised by Halfacree and Boyle, who commented that we need to move towards analysing mobility as an 'action in time' (1993: 337). Essentially, Halfacree and Boyle argue that treating residential moves as point-in-time events means that moves are divorced from the longer term context of the individual biographies within which they are situated (Findlay and Li, 1997). Halfacree and Boyle's paper suggests that it is important to analyse residential mobility as a process which unfolds over time (Kley and Mulder, 2010), within the context of a person's past experiences and their aspirations and expectations for the future.

Adopting the explicitly temporal perspective advocated by Halfacree and Boyle (1993) enables empirical analyses of residential mobility to engage more closely with life course theories than is typically possible in a cross-sectional study. Life course theories highlight the huge diversity of possible motivations for moving, emphasising that moves can only be understood in context (Mulder and Hooimeijer, 1999). As noted by Bailey (2009), the 'linked lives' of household members provide one important contextual influence on mobility decision-making and behaviour (Bailey *et al.*, 2004). The linked lives perspective suggests that the biography of an individual is deeply interlinked with and hence affected by the biographies of others (principally those they live or have lived with, as well as their wider social and kin networks). Life course theories also emphasise that residential moves take place within the context of biographical, social and historical time (Dykstra and van Wissen, 1999; Findlay and Li, 1997). This temporal context is, in addition, deeply interwoven with socio-economic and geographical structures. As a result, empirical work which draws upon life course theories can benefit from analysing residential mobility as a process

which takes place over time within specific familial, temporal and socio-spatial contexts (Kley and Mulder, 2010).

Considering mobility to be a contextualised temporal process has motivated a growing number of studies to link mobility decision-making to subsequent moving behaviour. These longitudinal studies recognise that our understanding of migration and residential mobility can be greatly enhanced by studying more than just actual moving behaviour (Kan, 1999). Following people through time enables longitudinal analyses to build upon the insights provided by cross-sectional studies of what makes people think about moving (Kleinhans, 2009; McHugh *et al.*, 1990; van Ham and Feijten, 2008), by investigating whether people who are thinking about moving subsequently go on to actually make residential moves.

Linking individuals' thoughts about moving to their subsequent moving behaviour carries an important advantage over delinked cross-sectional analyses of mobility decision-making or actual moving behaviour. According to Desbarats (1983a), the key benefit of this longitudinal approach is that it enables us *to evaluate whether a person's moving behaviour is consistent or discrepant with their prior thoughts about moving*. A longitudinal framework therefore allows the disaggregation of movers and stayers according to whether their moving behaviour is the product of choice (for instance when a person who wants to move goes on to do so) or a lack of choice (for example when a person does not wish to move but does so anyway). This is important for our understanding of mobility behaviour, as analyses of other demographic processes such as fertility demonstrate that people often fail to act in accordance with their previously expressed desires, intentions or expectations (for example Voas, 2003). Given that life course theories emphasise that people often face considerable restrictions and constraints when making moving decisions (Mulder and Hooimeijer, 1999), uncovering the extent to which mobility behaviour can be attitude-discrepant and analysing why this is the case is a central concern of this thesis.

1.2.2 Linking moving desires and subsequent moving behaviour

Over the last two decades, an increasing number of longitudinal studies have begun to link people's expressed thoughts about moving to their subsequent moving behaviour (De Groot *et al.*, 2011; Ferreira and Taylor, 2009; Kan, 1999; Lu, 1999a). These studies have largely overcome the twin problems of US-centrism and small sample sizes which characterised much of the longitudinal work conducted before the 1990s (Bach and Smith, 1977; Landale and Guest, 1985; Rossi, 1955; Speare *et al.*, 1975; van Arsdol *et al.*, 1968). Despite overcoming these issues, Kley (2011) cautions that much of the recent longitudinal literature nonetheless remains complex to interpret. She argues that this is partly due to a lack of conceptual clarity within studies. For example, many researchers fail to define and distinguish between conceptually distinct thoughts about moving (such as moving desires, intentions, plans or expectations). In addition, Kley (2011) notes that it is often difficult to compare the empirical findings of different studies because there is little uniformity in how moves are defined.

Despite this growing interest in longitudinal analysis, comparatively few studies have focused upon the links between moving desires and subsequent moving behaviour. Excepting preliminary work by Battu *et al.* (2005), Buck (2000a) and Ferreira and Taylor (2009), much of our knowledge about whether people behave in accordance with their moving desires derives from small scale studies conducted in the mid- to late-twentieth century United States (for example Landale and Guest, 1985; Rossi, 1955; Speare *et al.*, 1975). This lack of interest in linking moving desires to subsequent moving behaviour is surprising, as such an analysis provides three sets of unique benefits and insights. The first reason to study whether people act in accordance with their moving desires is that this approach can contribute to residential mobility theory. Fundamentally, assessing whether people act upon their moving desires allows us to investigate the extent to which people are able to use mobility as a strategy to attain their valued life goals (De Jong and Fawcett, 1981). This is because expressing a moving desire can be considered to be the expression of

a ‘stated preference’ for relocation, in a way that expressing a moving intention or expectation cannot. While expressing a desire to move indicates that a person perceives that mobility will have positive consequences, moving intentions and expectations are more value-neutral thoughts about relocation. Conceptually, it is possible to intend or expect to behave in a certain way without wanting to do so.

Moving desires can also be considered to be stated preferences for relocation because they are expressed in direct response to the perceived deficiency of a person’s current housing and neighbourhood situation (van Ham and Feijten, 2008). While the feasibility of moving is unlikely to inhibit people from expressing moving desires, the restrictions and constraints which could impede relocation are likely to be considered in much greater detail before a moving intention or expectation is expressed (De Groot *et al.*, 2011). Thus, while people who are dissatisfied with their home or neighbourhood are likely to desire to move (Speare *et al.*, 1975), only those dissatisfied individuals who perceive that actually moving is possible will also express an intention or expectation of moving. As a result, studies linking moving intentions or expectations to actual moving behaviour may conflate people who want to move but who feel unable to do so with those who are content to remain at their current location. Hence, linking moving desires to subsequent moving behaviour provides the most suitable method of disaggregating whether residential (im)mobility behaviour is volitional or the result of restrictions and constraints (Buck, 2000a; Desbarats, 1983a).

Such an analysis also enhances our understanding of the extent to which individuals are in control of their life course trajectories. While mobility is often conceptualised as a goal-directed behaviour, another strand of research emphasises that mobility can also be triggered by unwanted and possibly unexpected life events, such as partnership breakdown or the loss of a job (Rabe and Taylor, 2010). Such events may stimulate undesired moves. In addition, individuals may be forced to make unwanted (tied) moves to satisfy the needs of other members of their household. A large literature has shown that this is particularly relevant when couples make a decision (not) to migrate

(Cooke, 2008a). In these cases, one individual may be compelled to move or stay for the sake of their partner's career (Smits *et al.*, 2003). As a result, it is important to distinguish volitional residential moves from those which were undesired, as this distinction is likely to indicate the level of control a person has had over their moving behaviour. Examining the links between moving desires and subsequent moving behaviour can therefore reveal how different types of triggers and constraints lead to different mobility decision-making processes and different residential outcomes.

A second reason to analyse the links between moving desires and subsequent moving behaviour is that this framework enables the evaluation of urban policy. For many years, a large proportion of Western urban policies have been based around the assumption that selective mobility provides an important mechanism to alleviate many social problems (Imbroscio, 2012). For instance, policy initiatives designed to tackle concentrations of urban poverty have often involved encouraging the poor to relocate in order to stimulate gentrification and create mixed-income communities (Imbroscio, 2012). This liberal agenda is typically underpinned by a tacit belief that those people living in 'suboptimal' places (as occurs when the poor live in places with poor job access) must possess moving desires, which are somehow being frustrated by contextual circumstances. This may not always be the case, and Imbroscio (2012) suggests that greater attention also needs to be paid to 'placemaking policies' which seek to improve people's lives *in situ* (for instance through investment in subsidised public transport and neighbourhood renewal).

Enabling people to act upon their moving desires and hence exercise their liberal "right to free movement" (Imbroscio, 2012: 2) has become a core objective in UK housing policy over the last few decades. This aim is often expressed through the discourse of choice, as it is argued that the prosperity and well-being of households and the efficiency of the economy are enhanced when people can live where they would like to. Promoting housing choice has been a particularly strong theme in recent English housing policies. This can be seen in the Office of the Deputy Prime Minister's 2005 five-year housing plan *Sustainable Communities: Homes for All*, which aimed "to offer greater choice

and opportunity in housing across the country" (ODPM, 2005: 6). This emphasis on enhancing choice has been carried forward into the recent Coalition Government report *Laying the Foundations: A Housing Strategy for England*, which opens with the claim that "finding the right home, in the right place, can be an essential platform for people seeking to support their families and sustain work" (DCLG, 2011: 1). While laudable, such objectives are not unproblematic. Enabling people to exercise housing choice may in some circumstances conflict with policies seeking to improve deprived neighbourhoods (such as New Labour's New Deal for Communities), where population churn motivated by residential dissatisfaction is sometimes seen as an impediment to the creation of sustainable communities (Beatty *et al.*, 2009).

Linking the expression of moving desires to individuals' subsequent moving behaviour can help to evaluate housing policy by uncovering the extent to which people are able to act upon their moving desires. According to Brown and King (2005), people can only exercise 'real' or effective choice when they are able to act upon a decision by selecting from amongst distinct alternatives. This definition suggests that exercising a choice to move or stay requires an individual to act in accordance with their previously expressed relocation preferences. If many people are unable to realise their moving desires, this suggests that people find it difficult to exercise housing choice (perhaps due to micro level restrictions or macro scale constraints). Investigating whether this is the case is particularly pertinent in the context of the current economic crisis, which is likely to have greatly increased the constraints faced by individuals who desire to move.

The third and final reason to link the expression of moving desires to subsequent moving behaviour is that this longitudinal perspective enables us to identify and critique social injustice. If possessing the opportunity to live where you wish is the hallmark of a free society (Imbroscio, 2012), then it follows that individuals who cannot act in accordance with their moving desires may be somewhat disadvantaged. While being unable to realise a desire to move may be only a minor irritation for some people, for others this may be a much more negative experience. For instance, those who are 'trapped' in neighbourhoods

they dislike and want to leave may report lower levels of psychological well-being (Ferreira and Taylor, 2009). Such concerns are of particular relevance in the context of the Sustainable Communities Act 2007, which seeks to enhance the well-being of communities in England and Wales.

Given that constrained individuals such as the poor, ethnic minorities and social renters are disproportionately more likely to select into the least desirable areas, it seems possible that these individuals may also be more likely to express moving desires which they are then persistently unable to realise. Hence, investigating why some individuals do not act in accordance with their moving desires will shed light on the nature of the restrictions and constraints which most strongly affect the mobility process (Mulder and Hooimeijer, 1999). This will, in turn, contribute to our knowledge about the re-production of individual disadvantage, as well as highlighting how selective residential (im)mobility can contribute to the production of ethnically and socio-economically stratified neighbourhoods.

1.3 Thesis objective and structure

As a result of the above, the overall objective of this thesis is:

> *To gain insight into how the life course context affects both the expression of moving desires and the links between moving desires and subsequent moving behaviour.*

To address this objective, this thesis is organised into seven further chapters (see Figure 1.2 for a diagrammatic representation of the structure of the thesis). Chapter two contains a detailed review of the existing literature on migration and residential mobility. This literature review is organised to firstly outline the conceptual framework of the thesis and then articulate the four sets of specific research questions which guided the empirical research (section 2.6). These four sets of research questions are embedded within the four research 'themes'

outlined in Figure 1.2. Addressing these four sets of research questions fulfils the central objective of the thesis, as each is motivated by a clear gap in our knowledge of how moving desires are associated with subsequent residential (im)mobility over the life course.

Figure 1.2 Thesis structure

CHAPTER 1. Introduction

CHAPTER 2. Conceptual framework			
Theme 1. Analysing the relations between moving desires, expectations and actual moving behaviour	**Theme 2.** Investigating the linked lives of partners	**Theme 3.** Exploring the biographical dimension of mobility decision-making	**Theme 4.** Analysing desire abandonment and the duration of wishful thinking

CHAPTER 3. Research design

CHAPTER 4. A longitudinal analysis of moving desires, expectations and actual moving behaviour	**CHAPTER 5.** Partner (dis)agreement on moving desires and the subsequent moving behaviour of couples	**CHAPTER 6.** Following people through time: An analysis of individual residential mobility biographies	**CHAPTER 7.** Wishful thinking and the abandonment of moving desires over the life course

CHAPTER 8. Conclusions and discussion

Source: Author

Chapter three introduces the design of the studies conducted to address the research questions. The chapter commences by outlining the key philosophical and methodological considerations which influenced this thesis. Next, the chapter introduces and evaluates the types of data which could have been used to fulfil the thesis objective. Key issues such as the reasons for using secondary

data are discussed in some detail. The chapter concludes with a detailed discussion of the advantages and challenges of working with the British Household Panel Survey (BHPS), the data source deemed most appropriate for this study. Taken together, chapters two and three introduce and discuss the extended conceptual and methodological framework which informed the empirical work conducted in this thesis.

Each of the four sets of research questions introduced in chapter two are then addressed in turn in chapters four to seven. Figure 1.2 illustrates that each set of research questions grouped into a theme is addressed in a specific chapter. For example, theme one questions are addressed in chapter four, while theme two questions are the focus of chapter five. These empirical chapters are structured as independent research papers. As these four chapters are separate papers, each has its own theoretical, methodological, analytical and conclusions sections. While this carries the risk that there will be some repetition of material, care has been taken to ensure that there is as little duplication as possible. While these chapters can be read independently, they are best read after reading chapters two and three. This is because the conceptual and methodological discussion in these early chapters provides a detailed contextualisation of the research reported in each paper. Chapters four to seven are also best read in order, as the insights gained from answering each set of research questions informed and influenced the subsequent analyses. By answering the four sets of research questions, these chapters combine to enhance our understanding of how moving desires are linked to subsequent moving behaviour over the life course.

Chapter four was motivated by two principal observations about existing studies linking the expression of ‘thoughts about moving’ to subsequent moving behaviour. Firstly, such studies often lack clarity about the concepts under investigation. Hence, it is sometimes hard to disentangle whether researchers have linked moving desires, intentions, plans or expectations to actual mobility behaviour (Kley, 2011). Secondly, few studies have explored whether these pre-move thoughts are expressed in distinct combinations (c.f. Sell and De Jong, 1983). As a result, chapter four analyses the expression and realisation of

moving desires as they are expressed in combination with moving expectations (thereby separating people who desire but do not expect to move from those who desire and expect to move). The analyses reveal important distinctions between people who do and do not expect to act upon their moving desires. This has important consequences for subsequent moving behaviour. The chapter argues that these insights enable us to more precisely predict residential moves, while also revealing the different mobility decision-making pathways individuals follow in response to different life course experiences.

Chapter five builds upon these findings to focus upon how the household context configures the likelihood of a person realising their moving desires. While life course theories emphasise that an individual's behaviour is influenced by the people they live with (Bailey, 2009), most quantitative studies have so far neglected to analyse the intra-household dynamics of mobility decision-making (Sell and De Jong, 1978). This is particularly problematic when analysing the mobility behaviour of couples, as a large family migration literature has shown that couples make moving decisions at the household scale through the interactions between both partners (Cooke, 2008a). By linking together the records of partners in couples, chapter five explores whether the likelihood of an individual realising their moving desires is dependent upon the desires of their partner. The analyses demonstrate that individuals are far more likely to act upon a desire to move if this is shared with their partner. The chapter concludes by arguing that it is profitable to analyse households as collections of 'linked lives', as the life courses of others can both enable and constrain a person who wants to move from actually doing so.

A deeper engagement with life course theories also motivates chapter six. This chapter commences by arguing that the 'biographical' element of mobility decision-making has thus far been neglected (Halfacree and Boyle, 1993), as most longitudinal studies link pre-move thoughts to subsequent moving behaviour across only two or three waves of a panel survey. This means that little is known about the longer-term structure of moving decisions. In addition, rather little is known about how a person's mobility biography is affected by the long-term trajectories of their other life course careers. By

constructing and visualising the seventeen-year mobility biographies of a panel of BHPS respondents, the chapter reveals that the implications of experiencing a particular event (such as making a desired move) can differ greatly depending on the long-term context within which this event is situated. The chapter also demonstrates that some people are persistently unable to act upon their moving desires for long periods of time.

The final empirical chapter (chapter seven) develops this longer term perspective, arguing that it is pertinent to investigate how long it takes individuals to fulfil their moving desires. The chapter enhances the existing literature by demonstrating that it is also important to investigate the abandonment of moving desires. The results obtained from descriptive analyses and event history models show that age, life course ties and commitments, socio-economic resources and life events all influence the duration and outcome of 'wishful spells' (periods where an individual consistently expresses a moving desire).

To conclude, chapter eight discusses and synthesises the insights gained from the four empirical studies. Particular attention is paid to elaborating how these insights combine to fulfil the objective of the thesis and hence develop our understanding of behavioural processes of mobility decision-making. The chapter then reflects upon the key challenges experienced during this research project. Drawing upon the insights gained from this thesis and the challenges experienced during data analysis, the chapter then concludes by identifying some pertinent areas for future research effort.

Chapter 2

Conceptual framework

Despite social scientists' burgeoning interest in theorising and analysing diverse practices and experiences of mobility (Findlay *et al.*, 2009), the previous chapter contended that it remains important to analyse the relocation behaviour of individuals within countries. It was argued that it is particularly valuable to link the expression of moving desires to subsequent moving behaviour within a longitudinal framework. As a result, chapter one concluded by stating that the objective of this thesis is to gain insight into how the life course context affects the expression and realisation of residential mobility desires. Fundamentally, meeting this objective will develop our understanding of the extent to which people are able to use relocation to attain their valued life goals (c.f. De Jong and Fawcett, 1981).

As a first step towards meeting this objective, chapter two articulates the theoretical context within which this thesis is situated. Given the huge quantity of studies of population mobility, the chapter does not claim to provide an exhaustive review of the literature on migration and residential mobility decision-making and behaviour. Instead, the chapter seeks to outline and explain the conceptual framework which provides the overarching structure linking together the empirical studies presented in chapters four to seven.

To achieve this aim, this chapter begins with a brief discussion of the most pertinent theories of aggregate moving behaviour. After outlining a number of reasons why disaggregate analysis remains important, the chapter then introduces three theoretical perspectives which have had a profound influence on our understanding of mobility decision-making and behaviour. In this section, notions of family life cycles, stress-threshold/place utility models and finally life course perspectives are each outlined and critically discussed in turn. Synthesising the core insights of the latter two perspectives, the chapter then advances a longitudinal theory of mobility decision-making to conceptualise the

contextualised relationships between moving desires and subsequent moving behaviour. Four main gaps in our understanding of this process of mobility decision-making are then outlined and explored. Finally, the chapter then concludes with four sets of research questions designed to address these research gaps.

2.1 Analysing the geography of migration flows

2.1.1 Labour market perspectives

Scholarly interest in migration is often traced back to the publication of E.G. Ravenstein's *The Laws of Migration* in 1885. In this influential paper, Ravenstein used census data to articulate a set of social 'laws' which he argued governed the patterns of population mobility in late nineteenth century Britain. Inspired by Ravenstein's ecological approach, much twentieth century geographical research sought to identify, describe and analyse the geography of migration streams in Western (principally Anglophone) countries (Dennett and Stillwell, 2010). This interest in the geography of migration stimulated the development of a large number of migration models, each endeavouring to provide a conceptual framework for understanding population mobility patterns. These range from Stouffer's (1940) contribution on the importance of intervening opportunities, through Lee's (1966) 'push-pull' model to Zelinsky's (1971) ambitious theory of mobility transitions (reviewed in Öberg, 1995; Speare *et al*., 1975).

Many of these theories argue that migration flows are heavily influenced by the spatial structure of the economy, and in particular the geography of the labour market. This belief that migration is a response to economic conditions has infused much of the literature on population mobility since Ravenstein's pioneering analysis (Desbarats, 1983b; Halfacree, 2004). Indeed, Halfacree comments that this economistic view of migration has transcended

epistemological boundaries, as both Marxist and positivist scholars often agree that migration is principally driven by economic forces.

While a range of economic theories have been advanced to explain the geography of migration (Öberg, 1995), neoclassical economic theory has had perhaps the most profound influence on how migration flows have been conceptualised and studied over the last half century. Within the neoclassical tradition, migration is conceptualised as a process which helps to maintain equilibrium within the labour market (Boyle and Shen, 1997; Öberg, 1995). At the national scale, neoclassical theory predicts that individuals migrate away from areas of low wages and high unemployment, in search of the better opportunities offered by areas with higher wages and lower unemployment rates (Böheim and Taylor, 2002; Drinkwater and Ingram, 2009). Neoclassical economics argues that this movement of population ought to be mirrored by a reverse flow of capital investment into areas where wages are low and potential profits are thus higher (Öberg, 1995). By exporting labour from areas of surplus to areas where labour is in demand, migration flows therefore contribute to reducing regional inequalities in wages and unemployment rates (Battu *et al.*, 2005). This neoclassical argument that migration is a rational response to labour market disequilibrium has had a major influence on policymakers across the developed world. Many governments view migration as economically beneficial, believing that a spatially 'flexible' workforce should help to stimulate economic growth and reduce regional inequalities (Fischer and Malmberg, 2001; HM Treasury, 2008; McCormick, 1997).

Many empirical studies have tested the hypotheses of neoclassical theory by analysing national migration patterns (McCormick, 1997). Yet neoclassical economics also provides a framework for understanding why individuals and households decide to migrate. Neoclassical theory explains the net movement of people from areas of labour surplus to areas of labour demand as the aggregate outcome of individual and household utility maximising decisions. In a classic paper, Sjaastad (1962) argued that people migrate to invest in their human capital, as they expect to receive a future return on this investment. Sjaastad's model therefore conceptualised migration to be a

rational decision influenced by similar considerations as the decision to invest in skills training or advanced education. As migration is an investment decision, Sjaastad contended that people will only migrate when they expect that the benefits of migration, minus the transaction costs of moving, outweigh the utility that the person expects to derive from remaining in place (Battu *et al.*, 2005; Böheim and Taylor, 2002). As a result, Sjaastad theorised that migration can be considered to be a means of accumulating human capital, which should be remunerated with higher returns to an individual's labour over their lifetime.

Although Sjaastad argued that people do not just consider pecuniary costs and benefits when deciding whether or not to move, many studies use human capital theory to argue that people migrate directly in order to receive higher wages (for instance Böheim and Taylor, 2007). While the returns to migration may indeed accrue quickly through immediate wage increases, migration can also be a more long-term investment strategy which is expected to yield benefits when considered within the context of the entire life course. This occurs when individuals migrate to accumulate human capital through education or skills training, for instance when people relocate to attend university or to progress in their chosen career. Conceptualising migration as a long-term investment decision has lead many authors to argue that migration can be considered to be a mechanism for effecting social mobility. Places with a high density of occupational opportunities, such as the South East of England, are therefore likely to be particularly attractive to migrants aspiring to become socially mobile by changing jobs and improving their skills (Fielding, 1992a).

2.1.2 Non-labour market explanations

Morrison and Clark (2011) have contended that it is becoming less appropriate to conceptualise migration as an investment strategy, as the social and economic context within which migration decisions are made has changed radically since neoclassical theory was first formulated. These authors argue that social and economic changes may mean that migration is increasingly undertaken for non-economic reasons. Many recent studies of migration

patterns have sought to test this proposition, investigating whether migration is more than just a rational investment decision. For instance, several recent US and UK studies have disaggregated migration flows by stage in the life course. Using census data from the US and UK, Chen and Rosenthal (2008), Dennett and Stillwell (2010), Plane and Jurjevich (2009) and Plane *et al.* (2005) all found that people migrate to different types of places at different stages of the life course. While younger and more highly educated individuals tend to move to larger cities and places with a more dynamic economy, older people seem to move to areas with a better quality of life. These studies suggest that migration may only be a human capital investment strategy early in the life course. In contrast, the characteristics of the dwelling and neighbourhood as well as the amenities available within the local area may be more influential factors for the moving decisions of older people (Niedomysl and Hansen, 2010).

Demographic trends in Western countries have also sparked interest in analysing the migration patterns of particular population subgroups. As populations age across the developed world, a growing number of studies have focused specifically upon the migration patterns of older people (Plane and Jurjevich, 2009). For instance, Duncombe *et al.* (2001) modelled the destination choices of older migrants using data on migration flows from the US census, finding that older migrants flow to areas with low tax rates, a favourable climate and access to recreational opportunities. In Sweden, Lundholm (2012) has shown that older migrants flow to rural areas and in particular those with which they have a historic connection (for instance the parish of their birth). As a result of the increasing levels of ethnic diversity in many Western countries, studies have also charted whether patterns of ethnic migration produce or counteract ethnic segregation (Simpson and Finney, 2009 for a recent British example). Overall, the literature on the non-economic dimensions of migration patterns suggests that migration is a complex decision which is often influenced by consumption factors.

2.2 The value of disaggregate analysis[1]

Knowledge of the patterns of migration streams is valuable for policymakers, as the size and selectivity of migration flows to and from neighbourhoods, cities and regions influences the geography of population composition (Clark and Dieleman, 1996). Understanding migration flows and using these to derive population projections can therefore enhance planning and resource allocation decisions (Rees *et al.*, 2012). As migration is an important component of demographic change, such research can also contribute to debates about broader social issues such as population ageing and changing patterns of ethnic diversity (Wilson and Rees, 2005). Nevertheless, it is arguable that there are three dimensions of the mobility process which are neglected by many aggregate analyses of migration flows. Analysing people's motivations for moving, studying short distance residential mobility and investigating why people are residentially immobile all necessitate some form of disaggregate analysis.

2.2.1 Understanding why people move

Analysing why people move using data on migration flows is far from straightforward. As has long been recognised, such an approach can easily fall foul of the ecological fallacy by inferring individual motivations from aggregate patterns (Sell and De Jong, 1978). An important example of the problems this can create is discussed by Morrison and Clark (2011). These authors investigated why conclusions about the motivations for migration seem to differ strongly between aggregate analyses and cross-national evidence from micro-surveys. Broadly speaking, while economic factors emerge from aggregate analyses as the key motives for migration, micro-survey data suggests that most people report migrating over long distances for non-economic reasons (Niedomysl, 2011).

[1] Following Champion *et al*. (1998), studies investigating the size and composition of population flows are defined as aggregate analyses. Disaggregate analyses are defined as studies analysing the moving behaviour of individuals and households.

Morrison and Clark (2011) contend that to resolve these contradictory findings, we need to distinguish the factors which *motivate* moves from those which *enable* mobility (also Niedomysl, 2011). The authors propose that while continuity of employment may be necessary for people who want to migrate to actually do so, occupational advancement may not be the motive driving people to migrate. Instead, it is possible that many people wish to migrate for non-economic reasons, but only those who are able to secure ongoing employment at their chosen destination are able to actually act upon these desires. This selectivity of migrant flows could contribute to the oft-reported positive correlations between economic buoyancy and immigration, for the simple reason that economically buoyant regions produce more employment opportunities which enables more people to immigrate. In essence, Morrison and Clark (2011) are arguing that individuals may sometimes act as 'satisficers' in their occupational careers in order to attain valued non-economic goals through migration.

Developing our understanding of why people migrate can therefore perhaps best be accomplished through micro-surveys of migrants. Many studies have shown that this approach can simply and cheaply generate large amounts of useful data (for applications see Boyle *et al.*, 2009; Gobillon and Wolff, 2011; Lundholm *et al.*, 2004; Niedomysl, 2011). However, insights from structurationist perspectives nuance the value of this approach. As moving decisions may be informed by a complex web of entangled motivations and concerns, Halfacree and Boyle (1993: 339-340) posit that social surveys with closed questions may be in danger of 'forcing' individuals to report singular reasons for moving which poorly represent their multifaceted underlying motivations. This could hinder our appreciation of migration as a highly cultural event which recursively reproduces the wider social structures of capitalism and patriarchy (Fielding, 1992b; Halfacree, 1995; 2004). Responding to this critique, a variety of ethnographic studies have analysed the residential (im)mobility biographies of individuals. These studies reinforce that (im)mobility is an emotional process which is important for identity construction (Clark, 2009; Gutting, 1996; McHugh, 2000; Mason, 2004),

While qualitative evidence highlights the value of engaging with individuals to discover their motivations for moving, it is arguable that this can be more effectively accomplished at the population scale using social survey methods. The key to an effective survey of migrant motivations may be using open-ended questions which enable people to report multiple interlinked reasons for relocating (c.f. Halfacree and Boyle, 1993). Such an approach enables the analysis of migration processes at the macro scale, while overcoming the dangers of inferring the motivations for migration behaviour from the geography of migration flows.

2.2.2 Analysing short distance moves

Many aggregate analyses of mobility patterns focus specifically upon analysing the geography of longer distance migration. Such studies typically quantify the number of migrants who move between geographical areas and then analyse the size and composition of these flows (Champion *et al.*, 1998). While Champion *et al.* note that interzonal flows can be analysed at very fine spatial scales (for instance using UK census data at the Output Area scale), most analyses use comparatively large spatial units and hence ignore those moves made within each zone. For instance, Duncombe *et al.* (2001) and Plane *et al.* (2005) use data on intercounty migration flows in the US, while Dennett and Stillwell (2010) focus on moves made between local authority districts in Britain. This focus on the (usually) longer distance moves made between large spatial zones is likely to be due to the paucity of data available at very fine spatial scales, the low numbers of movers between any pair of small spatial zones, and the ethical and methodological challenges these small numbers produce. To circumvent these issues, most analyses investigating migration flows at fine spatial scales focus upon specific types of neighbourhoods and use broad typologies to facilitate analysis (for instance Robson *et al.*'s (2008) analysis of deprived Lower Super Output Areas in England).

Table 2.1 The distance over which residential moves are made in Britain

Distance moved (km)	Share of within-UK moves (%)
0-2	44.4
3-4	10.8
5-6	6.3
7-9	6.0
10-14	5.6
15-19	3.2
20-29	3.4
30-49	3.4
50-99	4.8
100-149	3.3
150-199	2.6
200+	6.1

Note: Excludes those with no usual address one year before the Census and those moving from outside the UK.
Source: Table 4.2 (p. 15) in Bailey, N. and Livingston, M. 2007. *Population Turnover and Area Deprivation* [a report for the Joseph Rowntree Foundation]. Bristol: The Policy Press.

This general focus on population flows between large spatial units overlooks the importance of also analysing residential moves made over shorter distances. These moves are important for two principal reasons. Firstly (and as discussed in chapter one), analysing shorter distance mobility is valuable for the simple reason that short distance moves are much more common than longer distance migration (Long, 1992). For the UK, Table 2.1 provides data drawn from the Sample of Anonymised Records (SARs) on the distance over which British individuals moved in the year preceding the 2001 census (Bailey and Livingston, 2007). The table shows that the majority of moves were made over very short distances. Over 50% of movers moved fewer than 5km, while only 20.2% moved further than 30km. Bailey and Livingston's (2007) results also show that 61% of movers moved within a single local authority district. As this short distance mobility is a key mechanism for (re)producing the geography of population composition (Clark and Ledwith, 2006), it is important to develop our understanding of the dynamics of shorter distance residential mobility.

A second reason to focus on the shorter distance moves neglected by aggregate analyses is that such an approach can enhance our understanding of why people desire and actually make residential moves. People are often

thought to migrate over long distances primarily for economic reasons, while a desire to adjust housing and neighbourhood consumption is thought to be the dominant motivation for moves made over shorter distances (Lundholm *et al.*, 2004; Niedomysl, 2011). This distance-motivation dichotomy is thought to exist as households are typically unwilling to migrate long distances to make housing and neighbourhood adjustments. This is because making long distance moves is disruptive and costly, as migration involves the total displacement of household members' daily activity spaces (Roseman, 1971). Total displacement means that migrating individuals are no longer able to access the nodes (such as workplaces, schools, shops and social contacts) they previously visited as part of their daily routines. Long distance moves are also thought to be costly as a lack of information about the destination housing market can lead to suboptimal housing choices, necessitating further adjustment moves (Clark and Davies Withers, 2007; Roseman, 1971). As total displacement becomes less costly when children leave home and workplace ties are severed, there is evidence that long distance migration for environmental or amenity reasons is most common around retirement (see Duncombe *et al.*, 2001).

Being willing to incur the costs of a long distance move implies that an individual perceives that migration will be highly beneficial, as may be the case if it is expected to produce upward occupational and social mobility. An extensive research literature has demonstrated that long distance migration is often a valuable means for individuals to attain career progression (Sjaastad, 1962; van Ham, 2001). Occupational progression is likely to be an especially powerful motive for migration among highly qualified individuals and those living in peripheral labour markets with a low density of job opportunities (Findlay *et al.*, 2009). Such individuals are likely to be particularly strongly drawn towards 'escalator regions', which Fielding (1992a) defined as areas providing the dense supply of jobs and the dynamic housing market necessary for accelerated social mobility (also Andersson, 1996; Champion, 2012; Fielding, 1995; Nilsson, 2003). Thus, the area in which a person lives may configure whether long distance migration is required to attain social mobility, while the geography of

labour and housing markets may also affect the destinations of long distance migrants.

To minimise the costs and disruption of moving, many studies argue that most individuals seek to move over short distances wherever possible. This is because shorter distance moves only involve the partial displacement of daily activity spaces. While partial displacement moves involve a change in dwelling, they do not require household members to change jobs, move schools or break their social networks (Roseman, 1971: 595), as typically occurs with longer distance migration. The boundary separating a total from a partial displacement move is likely to differ between individuals, depending upon their inclination and ability to invest in commuting and long distance travel. As it is usually possible to adjust housing and neighbourhood attributes by moving within the local area, households are unlikely to consider long distance migration if housing or neighbourhood factors are motivating a desire to move. As a result, analysing interzonal migration flows may not tell us much about the non-economic dimensions of mobility decision-making.

Re-examining why people move over any distance may also be becoming increasingly important if social and economic trends mean that it is becoming less appropriate to infer the motivations for moving from the distance over which a person moves (Clark and Huang, 2004). Clark and Huang (also Green, 2004) argue that the economic restructuring produced by globalisation may be altering mobility patterns. For instance, changes such as an increasing proportion of dual career households and the decentralisation of workplaces may alter the types and frequency of migration events. Demographic changes such as increasing rates of cohabitation and partnership dissolution may also alter the relationships between the motivation for moving and the distance over which moves occur (Flowerdew and Al-Hamad, 2004).

In support of this contention and as touched upon in section 2.2.1, recent studies from across the Western world have reported that many migrants state that they have recently moved over a long distance for non-economic reasons. This has been shown to be the case in New Zealand (Morrison and Clark, 2011), the Nordic countries (Lundholm *et al.*, 2004), the UK (Boyle *et al.*, 2009;

Buck, 2000b) and the US (Clark and Davies Withers, 2007). Nevertheless, it is important to note that the above studies still show that the relative importance of employment reasons does rise significantly as the distance moved increases. However, further justification for reconsidering the residential mobility-migration dichotomy comes from the accumulating evidence that people also often seek to reduce their commute times when making residential moves (Kim *et al.*, 2005). These findings suggest that job factors may play a greater role in short distance residential mobility than has been typically acknowledged (Clark and Davies Withers, 1999). Given this growing complexity of residential mobility patterns and as people's daily lives are increasingly configured by new forms and practices of mobility (Sheller and Urry, 2006), it seems valuable to analyse all forms of relocation behaviour. Given the practical difficulties associated with the analysis of population flows between small spatial areas, a deeper understanding of short distance mobility can be most easily achieved through a micro scale approach which analyses the mobility decision-making and behaviour of individuals and households.

2.2.3 The importance of residential immobility

The final weakness of studying migration flows is that this approach can tell us little about processes of residential immobility. While postmodernism and the 'mobilities turn' have encouraged social scientists to develop a conventional wisdom that 'mobility' is ever increasing (Cooke, 2011), it is arguable that this not the case for residential mobility. While non-corporeal, daily and temporary movements are increasing through the use of new communications technologies, rising levels of commuting and more frequent seasonal migration; analyses of residential mobility rates do not suggest that we are progressing towards a hyper mobile society (Cooke, 2011; Fischer, 2002; Wolf and Longino, 2005). Long (1992) notes that residential moves are actually quite rare events in individual lives, perhaps because people welcome immobility as an opportunity to establish valued cultural moorings (King, 2012). Indeed at the global scale, Malmberg (1997) remarks that it is actually quite surprising how rarely people

migrate. Understanding why people are residentially immobile requires engaging with the attitudes of individuals through disaggregate analyses.

Analysing migration flows also contributes little to our understanding of the extent to which residential (im)mobility is a volitional process. Typically, many positivist studies argue or assume that people who move are 'revealing' their migration preferences (Timmermans *et al.*, 1994 for discussion of stated and revealed preference modelling approaches). As a corollary, those who do not migrate are thought not to wish to move. However, insights from other epistemological perspectives suggest that we need to be cautious when viewing (non)migration as a 'choice' process. For Marxists, mobility behaviour is produced by an individual's position within the class system, which is itself embedded within the structure of the capitalist economy (Fielding, 1992b). As a result, Marxists have traditionally disputed the notion that people are in control of their own moving behaviour and hence able to exercise 'choice'. For many Marxists, the agency of individuals is limited as their behaviours are heavily constrained by wider economic structures (Lundholm *et al.*, 2004).

In contrast, the idea that (non)migration is a choice is also contested by scholars influenced by structuration theory. Drawing on the work of Giddens, Halfacree and Boyle (1993) contend that moving decisions ought not to be considered to be the outcome of a completely deliberate and calculative process (McHugh, 2000). Instead, these authors argue that migration decisions also involve exercising 'practical consciousness', through drawing on everyday experiences and commonsense knowledges (McHugh, 2000). This nuances the idea that migration is a deliberative choice, suggesting that the biographical, household and wider cultural contexts within which decisions are made may have a considerable but often hidden influence on an individual's relocation behaviour (Fielding, 1992b; Halfacree and Boyle, 1993).

These insights suggest that exploring the extent to which migration is a volitional process requires linking migrants' stated and revealed preferences. In contrast to the aggregate analysis of migration flows, this approach enables us to recognise that decisions (not) to move involve exercising agency but within the parameters set by a variety of constraints and cultural structures (Fielding,

1992b; Halfacree, 2004; Halfacree and Boyle, 1993). This approach recognises that household scale restrictions or macro contextual constraints may either impede migration or condition the destination choices available to people who want to move (Mulder and Hooimeijer, 1999). For example, the caring commitments of individuals can strongly configure (im)mobility behaviour (Bailey *et al.*, 2004). At the macro scale, the structure of the British social housing sector has been shown to have traditionally acted as a constraint to the long distance migration of tenants (Boyle and Shen, 1997; Hughes and McCormick, 1981).

Developing our understanding of how such restrictions and constraints produce residential immobility is difficult if little is known about individuals' stated preferences for relocation, as is the case in most ecological studies. Hence, studying only those individuals who move could lead to inaccurate predictions of future migration behaviour if the restrictions and constraints impeding individuals from acting upon their mobility preferences change over time. As a result, our understanding of residential mobility processes could be enhanced by directing greater attention towards the stated relocation preferences of both movers and non-movers. By linking stated preferences to subsequent behaviour, it is possible to analyse how the mobility decision-making process is affected by contextual opportunities, restrictions and constraints.

2.3 Why families move: Theorising residential mobility

2.3.1 Disequilibrium and residential mobility

Our understanding of the relocation process has been profoundly influenced by Peter Rossi's *Why Families Move* (1955). Rossi's study was the first to move beyond the analysis of migration flows, focusing instead upon how and why households make relocation decisions. By showing that most residential moves are undertaken for housing and neighbourhood reasons, Rossi's study radically

altered the conventional wisdom about why people relocate. Rossi's study has since inspired the development of a large residential mobility literature, much of which has adopted his micro scale (disaggregate) approach (Dieleman, 2001).

Following Rossi, many residential mobility studies contend that households move in response to disequilibrium (Boehm and Ihlanfeldt, 1986; Littlewood and Munro, 1997). While neoclassical theory conceptualises mobility as an anticipative utility maximising behaviour, residential mobility research has emphasised that disequilibrium in housing consumption also motivates households to relocate. In this perspective, people are thought to move home when their needs are no longer being met in their current dwelling and location (Rossi, 1955). This can occur when people perceive that their current dwelling and location do not match culturally constructed housing norms for people of their age (Morris *et al.*, 1976; Morris and Winter, 1975). According to Morris and Winter (1975), culturally constructed space, tenure, structure, quality and neighbourhood norms are all likely to influence a person's perception of disequilibrium and hence their relocation behaviour. Fielding's (1992b) work suggests that the interplay between wider place cultures and a person's self-image may also be an important factor motivating relocation. While much of the residential mobility literature focuses on these 'housing' components of disequilibrium, housing needs may also play a rather minor role in some moving decisions. Thus, labour force participation can also stimulate disequilibrium (for example to change jobs), as can educational events such as seeking to attend university.

If housing is conceptualised broadly as a bundle of inseparable site and situation attributes (Dieleman, 2001), households are thought to move in order to reduce disequilibrium by relocating to dwellings and locations which better match their needs and aspirations (Brown and Moore, 1970; Quigley and Weinberg, 1977). Residential mobility can therefore be thought of as a process of adjustment to the changes in a person's needs and preferences which occur over their lifetime (Deane, 1990). At the broad scale, residential mobility therefore enables households to 'match' themselves to dwellings which ought to satisfy their changing needs and preferences (Wheaton, 1990). Due to the

complexity of making moving decisions, this adjustment process is rarely instantaneous. Hence, a substantial proportion of immobile households may be living with disequilibrium at any given moment (Littlewood and Munro, 1997).

Relocating to a new dwelling is rarely a perfect mechanism for the alleviation of disequilibrium (Littlewood and Munro, 1997). This is because the choice set of housing options accessible to a moving household is constrained, both by their access to resources and also by macro contextual factors such as the supply of housing in the destination area (Mulder and Hooimeijer, 1999). For instance, young adults leaving home are often prevented from entering homeownership due to a lack of financial capital. As affordable rental housing consists of certain types of dwelling concentrated in particular areas (in Britain, often small flats located in inner cities), this constrains the choice set accessible to young adults moving out of the parental home (van Ham, 2012). The destination choices of individuals are also likely to be configured by their motivations for moving, with some motivations producing a much more geographically specific search process than others. For example, moving decisions triggered by job changes, health needs or relocations motivated by household formation may involve a much more geographically constrained choice process than moves made to attain a better quality of life at retirement.

Importantly, residential mobility is not the only option for households seeking to adjust to their changing housing needs and preferences. Households and individuals can make use of two alternative strategies to reduce disequilibrium without moving. Firstly, many mobility studies overlook the fact that households can, to an extent, alleviate disequilibrium by investing in their current dwelling, perhaps by constructing an extension or renovating the property (Deane, 1990; Littlewood and Munro, 1997; Seek, 1983). This option is, however, likely to be available only to certain households. It is for instance likely that homeowners have much greater freedom to modify their dwelling than renters. The reason for the emergence of disequilibrium may also alter the extent to which it can be alleviated without moving. Thus, disequilibrium triggered by a need to adjust one's daily activity space (for instance to access a new job) and disequilibrium generated by a need to move to a specific location

(as occurs before moving in with a partner) cannot be alleviated without a move. In addition, disequilibrium generated by neighbourhood dissatisfaction cannot easily be tackled without moving, as 'voice' strategies for modifying the neighbourhood via collective action are likely to take a considerable amount of time to become effective.

Secondly, individuals can also modify their perceptions of disequilibrium to ensure that their preferences and aspirations more closely match their current situation, negating the need for an adjustment move. This is likely to be most common when an individual perceives that they will be unable to move to adapt to their changing needs. Adjusting one's perception of disequilibrium can be considered to be a type of cognitive dissonance reduction behaviour, carried out to help an individual reconcile themselves to living in a dwelling or location they would prefer to leave (Festinger *et al*., 1956). This reduction of cognitive dissonance is likely to be a key mechanism to preserve the subjective well-being of individuals, not least because a person's home is a highly valued resource for their emotional security and sense of identity (Mason, 2004).

2.3.2 Residential mobility and the family life cycle

While most residential mobility studies conceptualise mobility as a response to disequilibrium, explanations of how this disequilibrium is generated have evolved since Rossi's pioneering study. Following Rossi, many early researchers linked the generation of disequilibrium to the transitions between household types which occur as individuals move through a family life cycle (Clark and Onaka, 1983). These life cycle models provided an important innovation in how to explain relocation behaviour, moving the analysis of mobility away from economic explanations towards a conceptual framework rooted in household demographics.

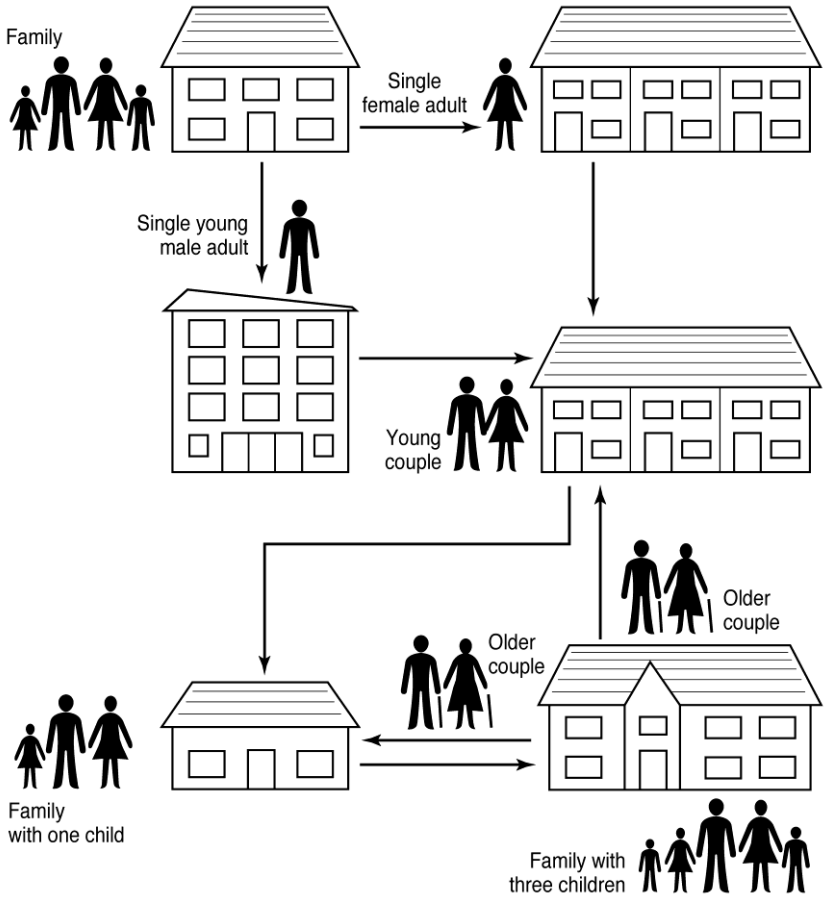
Figure 2.1 Stages in the family life cycle

Age	Stage
0	Birth
10	Child Adolescent
20	Maturity Marriage
30	Children
40	Children mature
50	
60	Retirement
70	Death

Source: Adapted from Figure 2.1 (p. 28) in Clark, W.A.V. and Dieleman, F.M. 1996. *Households and Housing: Choice and Outcomes in the Housing Market*. New Brunswick: Centre for Urban Policy Research. © 1996 Rutgers-The State University of New Jersey. Reproduced with the kind permission of Transaction Publishers, New Jersey.

Figure 2.1 provides one example of how a family life cycle could be conceptualised. The model suggests that individuals progress through a series of life cycle 'stages' as they age. At each stage, individuals are thought to live in a particular type of household which has a distinct set of specific housing needs. Thus, the housing needs of an individual in their thirties with a young family are represented as differing significantly from the housing needs of a seventy year old widow. Rossi (1955) argued that as each household type has specific housing needs, the changes in household type which occur as a person ages require individuals to relocate to reduce their housing disequilibrium. In particular, Rossi contended that the changing space needs produced by household transitions can trigger residential moves. This process can be seen in Figure 2.2, which shows how household transitions are thought to generate new housing needs and hence trigger residential moves. For example, the diagram shows that the birth of a child to a young couple increases their need for space, triggering an adjustment move out of their small terraced house to a larger dwelling. With the birth of more children this dwelling itself eventually becomes too small, requiring a further move to a larger family home.

Figure 2.2 Household transitions and changing housing needs



Source: Figure 2.2 (p. 29) in Clark, W.A.V. and Dieleman, F.M. 1996. *Households and Housing: Choice and Outcomes in the Housing Market*. New Brunswick: Centre for Urban Policy Research. © 1996 Rutgers-The State University of New Jersey. Reproduced with the kind permission of Transaction Publishers, New Jersey.

Rossi contended that space was not the only need which changed with life cycle transitions. People's spatial and neighbourhood preferences are also likely to change with their stage in the life cycle. This suggests that young families may not just move to acquire a larger dwelling; they may also relocate to access child-friendly neighbourhoods in the suburbs with access to good schools (Rossi, 1955). While this focus on the demographic drivers of mobility was an important innovation, life cycle theories rather neglected that many moves are not motivated by housing and neighbourhood conditions. For instance, many early studies made comparatively few attempts to incorporate job motivated moves or long distance migration into the idea of the family life

cycle, although social mobility motives were frequently discussed (Leslie and Richardson, 1961).

Those studies which did engage with this weakness typically focused on the employment career as an enabling or constraining factor, rather than as a direct motivation for moves (Leslie and Richardson, 1961). For instance, Doling (1976) argued that the purchasing power of individuals changes systematically with age. As people's access to resources changes, so do their dwelling and neighbourhood preferences and their ability to realise these desires (Leslie and Richardson, 1961). Developing these insights, Kendig (1984) synthesised the links between life cycle stages and housing choices into the concept of the housing career. He argued that changes in household structure, access to resources and the housing market context all combine to alter the types of housing people choose as they age. Kendig recognised that there is also considerable variation within age cohorts, as differential access to resources can lead two individuals of a similar age to have very different housing careers. Kendig's work shows some anticipation of later criticisms of life cycle theories for providing a rather normative and deterministic vision of individual lives (Warnes, 1992).

2.3.3 Stress-threshold models: Place utility and residential satisfaction

In the 1960s and 70s, researchers developed the concept of place utility to help explain household mobility behaviour and housing choices. Place utility theories integrated insights from life cycle theories with neoclassical economics, attempting to create a formal framework for understanding how households perceive and move in response to disequilibrium. Borrowing terminology from neoclassical economics, Wolpert (1965) argued that households calculate the relative 'place utility' of dwellings based upon how well each is perceived to meet the needs and preferences of household members. Dwellings which a household perceives as providing a high level of place utility are perceived to be highly attractive, as they will satisfy the household's needs better than dwellings which have a low place utility (Brown and Longbrake, 1970). Residential mobility is therefore a means for households to move from places which have a

low level of place utility to dwellings which should provide them with a higher level of utility.

Importantly, Wolpert proposed that mobility was not a utility maximising behaviour, as households do not continuously evaluate the 'fit' provided by their dwelling relative to the other options available within the housing market (Mulder, 1996). In the place utility tradition, people only begin to consider moving when they perceive that their current place utility has dropped below a personal threshold (Brown and Longbrake, 1970). The level of this threshold represents the minimum level of utility each household is prepared to accept from their residence. When place utility drops below this threshold and a household decides to move, they then attempt to relocate to the alternative dwelling which will provide them with the highest level of place utility (Wolpert, 1965). This dwelling selection process is constrained by the limited availability of information, which influences both the choice set the household assesses and their evaluations of the utility provided by different dwellings (Brown and Moore, 1970). Place utility calculations therefore influence two steps of the mobility decision-making process: the initial decision to move and the choice of a new dwelling (Brown and Longbrake, 1970; Brown and Moore, 1970). Both these decisions are made within the context of an individual's bounded rationality (Mulder, 1996).

Wolpert's basic framework was extended in Brown and Moore's (1970) behavioural model of residential mobility. Brown and Moore argued that households experience 'stress' when their current dwelling and location do not meet their needs and preferences as completely as other properties in their awareness space (Clark and Cadwallader, 1973). Perceiving housing stress therefore indicates that a household believes they could be better off elsewhere, as their current level of place utility is lower than that attainable in a new dwelling and location. Stress can be produced endogenously by changes in a person's needs triggered by life events (for instance the birth of a child), or alternatively by exogenous changes in the local area (such as the changing socio-economic or ethnic composition of neighbourhoods). Households will only

consider moving when the level of perceived housing stress rises past a given threshold, triggering the search process (Brown and Moore, 1970).

Figure 2.3 Speare's model of the initial phase of mobility decision-making

Source: Figure 1 (p. 176) in Speare, A. 1974. Residential satisfaction as an intervening variable in residential mobility. *Demography* 11 (2), pp. 173-188 © Population Association of America, 1974. Reproduced with the kind permission of Springer.

Several authors have commented that while place utility and housing stress are useful concepts, they are not easily perceived, articulated or measured through interviews or social surveys (Brown and Longbrake, 1970; Sell and De Jong, 1978). This weakness was addressed in Speare's work on residential satisfaction (Speare, 1974; Speare *et al.*, 1975). Speare's studies posited that households move in response to dissatisfaction, which mediates the link between housing stress and residential mobility (Figure 2.3). Speare contended that the level of place utility and housing stress a household perceives in their current dwelling determines their level of (dis)satisfaction. When dwellings no longer meet the needs of household members, they experience stress and express dissatisfaction (Speare *et al.*, 1975; Speare, 1974). When the level of dissatisfaction experienced exceeds a given threshold, the household then

begins to consider moving. This leads them to search for a new dwelling which they perceive will improve their level of satisfaction.

Although Speare *et al.* (1975) contended that their satisfaction approach differed significantly from place utility theory, it is arguable that the two are extremely similar (Clark *et al.*, 2006). Both provide a simple framework for understanding how disequilibrium drives residential mobility, proposing that moving is a behavioural response to stimuli (Halfacree and Boyle, 1993). Although Speare and his colleagues argued that the satisfaction approach was better at conceptualising the subjective nature of *perceived* disequilibrium, the subjectivity of place utility calculations was previously noted by both Brown and Longbrake (1970) and Wolpert (1965). In addition, Brown and Moore (1970) explicitly recognised that housing stress may be experienced as dissatisfaction, although this was not discussed in detail.

In arguing that people express dissatisfaction when they experience housing stress, Speare's main contribution seems to have been to provide a less abstract and hence more testable model of how housing stress triggers moving decisions. While people are unlikely to be able to articulate how 'stressed' they feel in their current home, they are much more likely to be able to respond to questions about their level of residential satisfaction. Given the recent growth of interest in analysing life satisfaction and subjective well-being (Blanchfower and Oswald, 2008), it is unsurprising that Speare's work is enjoying something of a renaissance, with a number of recent studies examining the dissatisfaction model of mobility (Diaz-Serrano and Stoyanova, 2010; Rabe and Taylor, 2010).

The value-expectancy model of mobility decision-making provides a final extension of the place utility approach. According to Sell and De Jong (1978) and De Jong and Fawcett (1981), this model proposes that households move in order to attain 'valued goals' which are not being fulfilled in their current location. The value attached to each goal and the expectancy of the goal being fulfilled in each location interact to condition the choice of a new dwelling. In common with both the place utility and satisfaction approaches, the value-expectancy model still proposes that households move in response to perceived

disequilibrium between where the household currently lives and where the members of the household would like to live. As with place utility theories, the value-expectancy model has comparatively little to say about why households come to initially experience disequilibrium. Nevertheless, the value-expectancy model does provide a framework which can more easily accommodate moves motivated by non-housing related reasons than the satisfaction approach.

2.3.4 Residential mobility within a life course framework

For approximately thirty years following the publication of Rossi's *Why Families Move*, most residential mobility studies situated their analyses either explicitly or implicitly within the theoretical context of a family life cycle. This reliance on the concept of a common life cycle was increasingly challenged during the 1980s and 1990s (Feijten, 2005). Researchers argued that two features of life cycle models made them increasingly unsuitable for understanding the links between household processes, residential mobility behaviour and the development of housing careers.

The first problem with the concept of a family life cycle is that it is both is normative and deterministic (Bailey, 2009; Warnes, 1992). Arguing that humans experience a predictable and uniform household trajectory as they age ignores that many people have less typical biographies (Geist and McManus, 2008). For instance, life cycle theory does not accommodate individuals whose lives are punctuated by partnership dissolution, long spells of unemployment or frequent long distance migrations. By positing the existence of a 'normal' life trajectory, life cycle theories implicitly construct individuals with different trajectories as deviant and atypical. This devalues their experiences and hinders our understanding of how people experience residential mobility over their lifetimes. Life cycle theories also have little to say about the variations in experiences within age cohorts, for instance due to social class or differing levels of affluence. Life cycle theories can therefore provide only a partial conceptualisation of housing biographies. Although a wealth of evidence has shown that certain housing experiences are more common at particular ages,

the notion that people move through a linear pathway of household types and housing states as they age is highly problematic.

It is arguable that a second weakness of life cycle theories is that these are 1950s concepts which are no longer useful in the radically different demographic and economic contexts of the twenty-first century (Warnes, 1992). While life cycle theory was normative and deterministic even in the 1950s, Warnes (1992) contends that it is now impossible to speak of a 'normal' housing career which is divisible into unique segments identified by the age of the head of the household (Geist and McManus, 2008). Table 2.2 provides examples of how several demographic trends which have developed since the 1950s have made it increasingly challenging to conceptualise a 'typical' life cycle and hence a 'normal' housing career. Overall, the trends enumerated in the table have combined to dramatically increase the level of heterogeneity within life trajectories over the last few decades.

Table 2.2 Recent demographic trends and their implications for life cycle models of housing careers

Demographic trend	Implications for life cycle models
1. Higher rates of cohabitation and a later age of marriage	People spend longer periods of time living alone and couples often live together prior to marriage. It is less common for individuals to leave home or move to marry. The role of marriage as a mobility trigger may be declining.
2. Later childbirth	Later childbirth means couples may possess a greater level of resources before starting a family. This may enable moves to be made in anticipation of childbirth, rather than in response to a lack of space after children are born.
3. Greater rates of partnership dissolution and re-partnership	When partnerships dissolve, individuals often experience 'downward' moves in their housing careers (for instance moving from ownership to renting). Rising rates of re-partnership mean that moves to cohabit or marry do not only occur at younger ages.
4. Population ageing	It is increasingly difficult to consider older people to be a single demographic group. There is an increasing diversity of household and housing states experienced later in life.

Source: Author

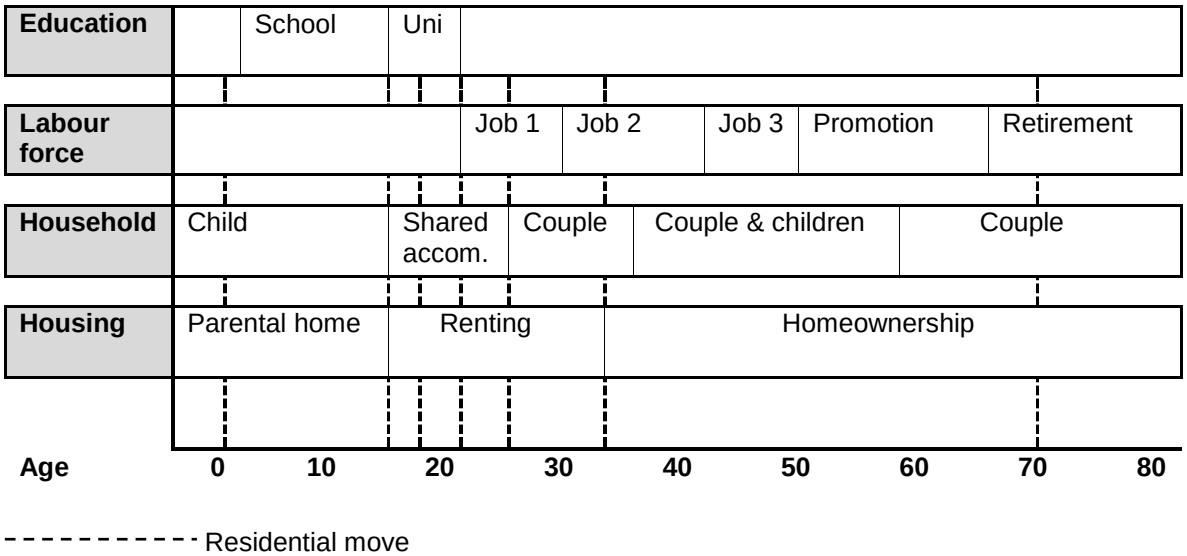
To respond to these critiques of life cycle theories, researchers in the 1990s began to draw upon the concept of the *life course* to help understand residential mobility behaviour (Warnes, 1992). Bailey (2009: 407) defines life course theories as seeking "to describe the structure and sequence of events and transitions through an individual's life". In contrast to life cycle theories, the life course approach emphasises that individuals negotiate diverse pathways through life (Geist and McManus, 2008). Rather than highlight the structure of human lives, life course theories allow for a greater recognition of human agency through the concept of the personal biography (Bailey, 2009; Dykstra and van Wissen, 1999). Conceptually, life course theories argue that these biographies are built up gradually through the cumulative effects of the life events an individual experiences as they age.

For the analysis of relocation behaviour, Mulder and Hooimeijer (1999) propose a life course model in which life events can be grouped into four parallel life careers. According to this model, each person's biography is produced by the cumulative effect of events occurring in these education, labour force, household and housing careers (Mulder and Hooimeijer, 1999). These careers develop in parallel and are deeply interlinked, as events in one life career may have implications for the development of the others. As a result, Bailey (2009) contends that life course theories provide a valuable framework to conceptualise the relationality and synchronicity of life events and significant life transitions. This relationality and synchronicity of events is important *within* individual biographies and also *between* the biographies of different individuals, for instance when people live together as collections of 'linked lives' (Bailey *et al.*, 2004).

A hypothetical example of the development of the four parallel life careers of one individual is shown below in Figure 2.4 (note that over time people also build up a 'mobility career' from the cumulative impact of their residential (im)mobility behaviour). For simplicity, the influence of linked lives and macro contexts are not represented here. The figure shows the types of state individuals can pass through in their life course careers, the events which can trigger changes in state, and how relocation can link together the four life

course careers. For instance, moving out of the parental home to attend university is an event which can affect the education, household and housing career at the same time (Figure 2.4). This highlights the value of studying the relationality and synchronicity of events (Bailey, 2009), as a person's biography is produced by the *timing* and *ordering* of events as well as the *duration* of different states they pass through (Feijten, 2005). Thus, while different individuals may experience the same events in the same order, these may not occur at the same age (and vice versa). Life course careers can also be largely independent, as Figure 2.4 demonstrates that changing jobs may sometimes only affect the labour force career (if the person does not also change their household type or spatial location). Overall, the figure illustrates the complexity of life course biographies, while also hinting at the diversity of possible life course trajectories individuals can experience.

Figure 2.4 A diagrammatic example of a hypothetical life course



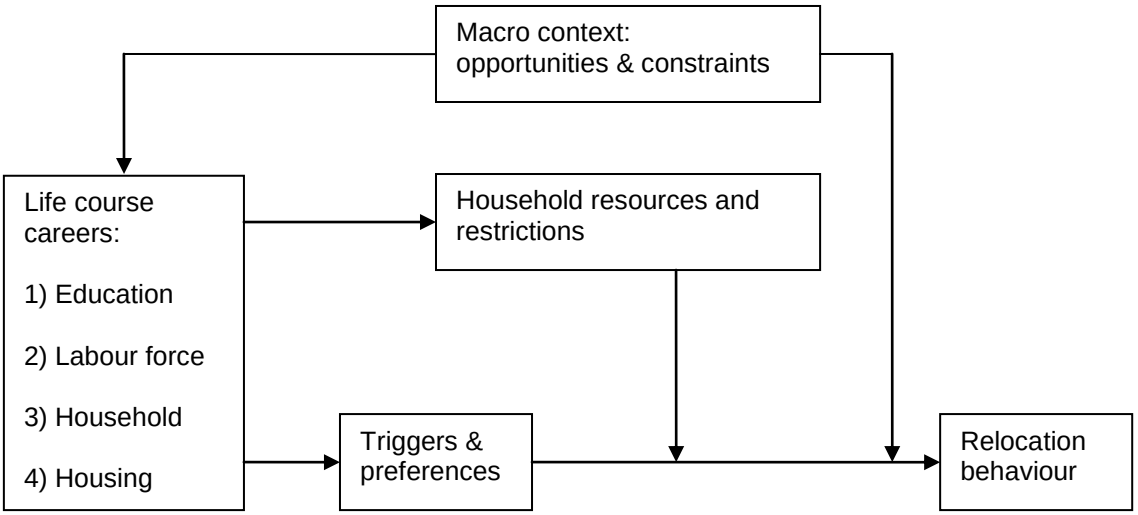
Source: Author. See Clark and Dieleman (1996: 33) for an alternative formulation.

While the above figure illustrates the conceptual value of life course theories, it is important to be aware that these are not without their weaknesses. Given the importance that life course theories attach to fluidity, fleet footedness and diversity (Bailey, 2009: 413; Geist and McManus, 2008), there is a danger of 'life course theory' becoming a somewhat nebulous and ill-defined concept

which can be invoked as a theoretical structure in many different ways and contexts. In addition, the difficulty of empirically operationalizing many of the core concepts of life course theories poses a significant challenge to researchers. Thus, while the ideas of personal biographies, relationality and synchronicity are powerful concepts, they are difficult and complex to analyse even when it is possible to access the necessary longitudinal data.

Despite these problems, life course theories have become so popular within mobility studies that Clark and Huang (2003) contend that life course theory constitutes a new research paradigm (also Clark and Davies Withers, 2007). By emphasising the diversity of individual biographies, life course theories undoubtedly provide a more flexible framework for understanding the generation of disequilibrium than concepts of a family life cycle. Developing these broad insights, Mulder and Hooimeijer (1999) have proposed an important conceptual model explaining how changes in the life careers of individuals affect their subsequent moving behaviour through the generation of disequilibrium. This model is shown in Figure 2.5.

Figure 2.5 Residential mobility within a life course framework



Source: Figure 6.1 (p. 164) in Mulder, C.H. and Hooimeijer, P. 1999. Residential relocations in the life course. In: *Population Issues: An Interdisciplinary Focus*. L. van Wissen and P. Dykstra (eds). New York: Plenum Press, pp. 159-186. © 1999 Kluwer Academic/Plenum Publishers. Reproduced with the kind permission of Springer Science and Business Media.

Figure 2.5 shows that households move in response to the disequilibrium generated when a dwelling and location no longer meets the needs, preferences, desires or aspirations of household members (Clark and Ledwith, 2006; Mulder and Hooimeijer, 1999). This occurs due to events or gradual processes of change within each household member's four parallel life careers. While Rossi's (1955) life cycle approach recognised that disequilibrium is generated by changing household structures, the life course framework suggests that changes in the other three careers may also produce disequilibrium and hence stimulate residential mobility (see Figure 2.4). As a result, the life course framework provides a means to explain both economically and non-economically motivated moves. Adopting a life course approach also helps us to recognise that people often move for a host of interlinked reasons rooted within the contexts of their daily lives (Halfacree and Boyle, 1993).

Mulder and Hooimeijer (1999) argue that the life course career trajectories of individuals can stimulate residential mobility in two different ways. Firstly, gradual processes of change can produce new preferences, which, over time, lead people to make residential moves. This can occur when processes in an individual's life course careers cause housing stress to accumulate and residential dissatisfaction to increase (see Speare *et al.*, 1975). When the level of housing stress passes a personal threshold, the individual may attempt to relocate (Brown and Moore, 1970; Wolpert, 1965). Following Rossi (1955), this could occur as the shortage of dwelling space increases as a person's family grows in size. Alternatively, the cumulative effects of a long commute may cause the gradual build up of housing stress and dissatisfaction, eventually triggering an adjustment response.

According to Brown and Moore (1970), this gradual increase in housing stress can also be produced by changes exogenous to the individual's life course careers. Gradual changes in the neighbourhood context may cause incremental increases in housing stress, eventually stimulating residential moves. As neighbourhoods are often a source of social prestige or conversely a marker of disadvantage, changes in the socio-economic composition of a person's local area may create housing stress and stimulate an adjustment

response. Testing this hypothesis, Boehm and Ihlanfeld (1986) have shown that households move out of declining neighbourhoods, although Rabe and Taylor's (2010) analysis suggests that it may actually be the *perception* of changes in neighbourhood quality which has the strongest effects on moving behaviour (also Kearns and Parkes, 2003).

Gradual changes in the ethnic composition of a person's neighbourhood may also affect their perceptions of housing stress and hence their relocation behaviour. Using Dutch data, van Ham and Clark (2009) have shown that changes in the ethnic makeup of neighbourhoods affect patterns of outward mobility. Higher concentrations of ethnic minorities were found to increase the outward mobility of native Dutch residents, while simultaneously reducing the propensity for ethnic minorities to leave the same areas. This may be because the ethnic makeup of neighbourhoods affects how they are perceived by different groups of people (Clark and Ledwith, 2007). If changes in the ethnic composition of a neighbourhood affect its reputation, this may in turn affect perceptions of housing stress and trigger residential mobility adjustments by residents and those living elsewhere (Permentier *et al.*, 2009).

In Figure 2.5, Mulder and Hooimeijer (1999) also contend that residential moves can be suddenly triggered by experiencing particular life events. This could occur when a move is required to form or dissolve a partnership, or to accept a new job in a distant location. As people may expect to experience a given event in the future, they may also make anticipative moves to adjust their housing consumption before this event actually occurs (Clark and Davies Withers, 2007; Feijten, 2005). A growing literature has explored how experiencing (or expecting to experience) life events can directly trigger residential mobility and affect housing careers. The key insights from this literature are shown in Table 2.3.

Table 2.3 The links between major life events, residential mobility, and the housing career

Life events	Key findings	References
1. Partnership formation and dissolution	Strong positive associations between forming a partnership and making residential moves. Partnership dissolution stimulates mobility, often for several years after the event. People often move out of homeownership into rental housing following relationship breakdown. Partnership dissolution has long-term negative effects on housing careers	Bramley *et al.* (2006); Feijten and van Ham (2010); Feijten (2005); Flowerdew and Al-Hamad (2004); Gram-Hanssen and Bech-Danielsen (2008); Mulder and Malmberg (2011); Mulder and Wagner (2010)
2. Natural events such as childbirth or the death of a spouse	It is common to move in anticipation of childbirth. Households moving in anticipation of childbirth typically move to single family dwellings. Childbirth is also associated with moving to higher quality neighbourhoods. Losing a spouse does not appear to act as a trigger for residential moves.	De Groot *et al.* (2011); Feijten and Mulder (2002); Michielin and Mulder (2008); Rabe and Taylor (2010)
3. Labour force participation events such as changing jobs, unemployment and retirement	Job changes are positively associated with mobility, although this effect is mediated by housing tenure and the household context. Unemployment is positively associated with mobility and moving to lower quality neighbourhoods. Although mobility is rare later in the life course, people have a higher propensity to move around the age of retirement.	Battu *et al.* (2008); Böheim and Taylor (2002); Clark and Davies Withers (1999); Ermisch and Jenkins (1999); Kan (2002); Rabe and Taylor (2010)

Source: Author

Finally, Figure 2.5 also shows that residential mobility decision-making does not take place in a contextual vacuum. Both the micro scale context of the household and the wider macro context affect people's moving decisions. This recognition of the importance of the context within which events (do not) occur is a powerful feature of the life course approach (Dykstra and van Wissen, 1999). Context can be thought of as more than just the temporal and spatial location of an individual, as it also encompasses their relational positions within cultural and political-economic structures and social or kin networks (Gutting, 1996; Halfacree, 2004; Mason, 2004). These contextual factors can be thought of as combining to affect both of Brown and Moore's (1970) two stages of mobility decision-making. In this framework, contextual factors operating at

three principal scales influence people's initial decisions to move, as well as their subsequent destination choice processes. Each is now discussed in turn.

2.3.4.1 Biographical contextual effects

As noted by Halfacree and Boyle (1993), deciding to relocate is a process which occurs within the long-term context of an individual's personal biography. An individual's perception of disequilibrium and perhaps the point at which they decide to relocate may therefore be influenced by their past experiences of (im)mobility. The importance of past mobility behaviour for predicting a person's future propensity to move has traditionally been explained using cumulative inertia or mover-stayer models (Flowerdew and Al-Hamad, 2004). The cumulative inertia model postulates that the longer people live in a given location, the stronger their social and economic ties to their neighbourhood become. This produces rising levels of place attachment and a growing reluctance to relocate. Davies and Flowerdew (1992) have shown that cumulative inertia does appear to impede people from moving over long distances. In contrast, the mover-stayer model contends that people have an unobservable latent predilection to make residential moves throughout their lives (Belot and Ermisch, 2009). As a result, studying individuals' past moving behaviour can provide clues as to who is most likely to move again in the future.

A person's biography may also affect their destination choice once they have decided to relocate. Specific attachments formed earlier in the life course may affect a person's later decision-making (Stovel and Bolan, 2004), by influencing how attractive they perceive places to be. For instance, Feijten *et al.* (2008) have shown that people who are born in a rural or suburban area more often move back to these types of places later in life. Using Swedish register data, Lundholm (2012) has demonstrated that older counter-urbanising migrants are often drawn towards the parish or municipality in which they were born or grew up. Cultural preferences for different types of dwelling may also be formed early in the life course, affecting later destination choices. For example, Helderman and Mulder (2007) argue that individuals whose parents are

homeowners may develop a cultural preference for homeownership (Mulder, 2007). These inherited tenure preferences may affect later dwelling choices, even after taking into account the influence of intergenerational transfers of housing wealth. Qualitative evidence from a variety of studies suggests that people also choose dwellings in order to project their chosen cultural identity to others (Sirgy *et al.*, 2005; Winstanley *et al.*, 2002). As a result, an individual's desire to construct and display a particular biographical narrative may also inform their residential choices.

2.3.4.2 Contextual effects at the household scale

There is a tension within the mobility literature as to whether it is most appropriate to consider mobility decision-making and behaviour to be individual or household processes (Sell and De Jong, 1978). Much of the early literature argued that moving decisions are taken at the household level, while assuming that households behaved as if they were individuals (Brown and Moore, 1970; Rossi, 1955; Speare *et al.*, 1975; Wolpert, 1965). This is problematic for a number of reasons. Firstly, the composition of households changes frequently as individuals move in and out of different living arrangements. This renders it difficult to conceptualise households as units which persist through time. More importantly, households cannot easily be considered to be unified social units, as they are made up of individuals with their own needs, preferences and aspirations. A large migration literature has drawn our attention towards the complex processes of decision-making which therefore take place when couples or families deliberate migration (for instance Abraham *et al.*, 2010; Seavers, 1999).

As a result of these considerations, it is valuable to theorise individual mobility decision-making as taking place within the context of a wider household unit (Mulder and Hooimejier, 1999). This fits well with life course theory's conceptualisation of households as collections of 'linked lives' (Dykstra and van Wissen, 1999), where the life careers of each member of a household affect the careers of those they live with (Bailey *et al.*, 2004). Understanding households

to be collections of linked lives suggests that people may make residential moves as another member of their household is experiencing disequilibrium, even if they themselves have no reason to leave their current location. A large literature on family migration has explored this process, focusing principally upon which partner's employment needs determine the moving behaviour of couples (Boyle *et al.*, 2001; Cooke, 2008a; Mincer, 1978). This literature has highlighted the importance of recognising that the mobility decision-making of couples is affected by the prevailing gender norms surrounding women's labour force participation and the household division of labour (Smits *et al.*, 2003). More recently, the concept of linked lives has also been extended beyond the interlinkages between two partners to also include children (Bushin, 2009).

Family migration studies have highlighted the inherent complexity of making relocation decisions in a household context, especially when both partners in a couple wish to develop their careers or even just participate in the labour market (Green, 1997; Jarvis, 1999). Due to the difficulty of finding a location which allows two partners to access their workplaces, couples where both partners are active in the labour market are less mobile than single-earner partnerships (Jarvis, 1999). As a result, partners in dual-earner and especially dual-career couples may use long commutes or temporary Live Apart Together arrangements as a substitute for permanent family relocation (Hardill *et al.*, 1997; Green, 1997; van der Klis and Mulder, 2008). Understanding why people (do not) make moving decisions therefore clearly requires consideration of the life careers of those they live with.

The destination choices of individuals who have already decided to move may also be configured by the life careers of other household members. Couples seeking to be active in the labour market have been shown to strategically choose their residential location to satisfy the employment and housing consumption demands of both partners (Green, 1997; Seavers, 1999). In the event of intra-household disagreements, differential levels of bargaining power configured by gender norms may impact upon which person sacrifices their housing and spatial needs for the sake of the overall household unit (Abraham *et al.*, 2010; Cooke, 2008a). Having children may further constrain

the choice of a new destination to places which are perceived to be child-friendly and which have access to desirable schools.

According to Mason (2004), individual mobility biographies are also constructed relationally through the interactions between a person and the individuals in their extended social and kin networks. The geography of each household member's networks may therefore constitute a further factor affecting the mobility decision-making of everyone in a household (Mulder, 2007). This could impinge upon whether individuals decide to move in response to disequilibrium. For instance, people may be inhibited from moving by living near to their family members (Michielin *et al.*, 2008). In addition, Belot and Ermisch (2009) argue that social and friendship networks reduce people's propensity to leave their current location. Conceptually, it may be that living in a location where a person has strong social or kin networks raises the threshold at which they consider moving in response to housing stress.

Household destination choices may also be influenced by the wider network of social and kin relationships of each household member (Mulder, 2007). By examining the destination choices of movers, a number of studies have shown that people tend to move towards family members who live outside the household (Michielin *et al.*, 2008; Petterson and Malmberg, 2009). This may be because individuals value the direct contact and support which is facilitated by living near to family members (Petterson and Malmberg, 2009). People may also move close to their relatives and friends because these contacts provide information and support with searching their local housing market (Brown and Moore, 1970). The relative importance of these two motivations and the overall importance of kin networks in housing choices are likely to vary over the life course and with the main reason for moving. For instance, Michielin *et al.* (2008) demonstrate that people are particularly prone to move near to their parents following relationship breakdown. It is therefore valuable to consider households as collections of linked lives which are further embedded within the wider contexts of social and kin networks.

Importantly, moving decisions and destination choices are likely to be affected by the resources accessible to the household unit (Mulder and

Hooimeijer, 1999). Greater access to financial resources derived from household income is likely to enable households to more quickly respond to perceptions of housing stress. This is because financial resources enable people to deal with the (un)expected transaction costs of moving (Mulder and Hooimeijer, 1999). In contrast, households are likely to be impeded from moving by owning their current residence. Moving home is considerably more costly for homeowners, due to the higher levels of transaction costs (such as agent fees, legal costs and stamp duty) associated with buying and/or selling a property (Helderman, 2007; Oswald, 1999). Although the UK has traditionally encouraged homeownership by imposing relatively low levels of transaction taxes upon moving homeowners (see van Ommeren and van Leuvensteijn, 2005 for an international comparison), British homeowners are still much less likely to move than renters who do not face substantial transaction costs when moving (Houston and Sissons, 2012).

Destination choice processes are also likely to be conditioned by a household's access to resources. Access to more desirable dwellings and neighbourhoods is likely to be facilitated by higher levels of financial resources. This process may be complicated by the nature of housing as a bundle of site and situation attributes, as this 'bundling' may force moving households to make trade offs and compromises when selecting a new dwelling (van Ham, 2012). A household's access to resources is likely to have a particularly strong effect on their tenure choices (Clark and Dieleman, 1996). As access to mortgage finance is necessary for most people to buy a property, people can generally only move into homeownership when they have accumulated sufficient wealth (van Ham, 2012). In contrast, policy changes over the last few decades have meant that the British social housing sector is increasingly accessible to only the most economically marginal households (Burrows, 1999). As the size of the social sector has diminished since the introduction of the 'Right to Buy' in 1980 (van Ham, 2012), it has become increasingly difficult for people with higher levels of resources and more stable household situations to access social housing (Burrows, 1999). Thus, the interactions between household resources

and the wider institutional context of the housing market strongly condition the destination choices of moving households.

2.3.4.3 Macro contextual effects

According to Mulder and Hooimeijer (1999), household moving decisions are affected and conditioned by the temporal and spatial contexts within which these decisions are made. These macro contexts can enable residential mobility by providing opportunities for relocation (Figure 2.5). At the most basic level, residential mobility is only possible when there are suitable dwelling vacancies available (Wheaton, 1990). In addition, the macro context offers enhanced opportunities for mobility when the costs of moving are low. Hence, reducing stamp duty has been a key means by which the British government has attempted to reinvigorate the moribund housing market over the last few years.

While the macro context can provide opportunities for relocation, it also constrains people's moving decisions (van Ham, 2012). Desbarats (1983a) proposed that this constraining influence operates in four distinct ways. Firstly, constraints can alter the opportunity set of dwellings which are accessible to a particular household. For example, the overall volume of vacant housing in an area necessarily restricts a household's opportunities to relocate. Secondly, macro contextual constraints also affect the opportunity set which is actually considered by a moving household (the effective choice set). Thus, the limited availability of information about destination housing markets may cause households to only consider moving to areas with which they are already familiar. A third way the macro context may constrain relocation behaviour is by conditioning the destination choices of moving households. For instance, the structure of metropolitan housing markets may mean that households seeking to move into an owned single family dwelling are compelled to also accept living in a suburban neighbourhood. Finally, macro contextual constraints can also directly inhibit choice actualisation by forcing people to behave in a way which is discrepant from their stated attitudes and preferences (Desbarats, 1983a). In

the housing market, this could occur when individuals wishing to move into homeownership are prevented from doing so by financial institutions' reluctance to provide them with mortgage finance.

Several dimensions of the macro context can affect the mobility decision-making process by providing both opportunities and constraints to relocation. According to Clark and Dieleman (1996), the national economic context has strong effects on residential mobility decision-making and behaviour. In the long-term, mobility patterns have been affected by labour market trends such as the increased labour force participation of women, growth of a service sector economy, decentralisation of employment and changing commute patterns (Clark *et al.*, 2003a; Green, 2004). These labour market trends alter the spatial distribution of opportunities available to households, as well as their access to resources.

In the shorter term, the fluctuations of regional unemployment and wage rates are likely to condition the mobility decision-making of households, by altering the balance of the costs and benefits of relocation (Dohmen, 2005; McCormick, 1997). This means that residential mobility decision-making is affected by labour market trends over macroeconomic cycles. For example, Hacker (2000) has shown that households (particularly homeowners) have a lower propensity to move when living in regions where high unemployment is creating considerable job uncertainty. Fluctuations in the business cycle may also provide financial opportunities and constraints to residential mobility. Macroeconomic trends such as the interest rate, rate of inflation and the institutional provision of credit all interact to condition people's inclination and financial ability to move home (Clark and Dieleman, 1996). As has become evident over the last few years, these factors have a particularly strong influence on whether households are able to access homeownership (Dieleman and Everaers, 1994).

The structure of housing markets also conditions whether people are able to move, as well as the dwellings they choose when relocating (van der Vlist *et al.*, 2002). Fundamentally, geographical variations in the supply of housing condition the dwelling choices of moving households (van Ham, 2012).

The relative costs of housing, influenced by the relationship between house prices and rent levels on the one hand and incomes on the other, can also influence residential mobility behaviour. Davies Withers *et al.* (2008) argue that households often seek to reduce their housing costs through mobility, with spatial and temporal variation in housing affordability affecting destination choices (Dieleman *et al.*, 2000). In a similar vein Henley (1998) has shown that housing equity has a strong effect on the moving propensity of homeowners. In particular, the negative equity created when house prices fall below the value of mortgage debts appears to act as a strong impediment to residential mobility (Chan, 2001; Ferreira *et al.*, 2010). As discussed in section 2.3.4.2, government policies which affect housing supply and affordability will therefore interact with household resources to condition mobility behaviours (Clark and Dieleman, 1996; Smith and King, 2012).

In addition, housing tenure structures also have strong impacts on residential mobility decision-making and behaviour. In the UK, it was traditionally argued that bureaucratic control of the social (particularly council) housing sector inhibits long distance migration across local authority boundaries (Boyle, 1998; Boyle and Shen, 1997; Hughes and McCormick, 1981). In contrast, the proliferation of assured shorthold tenancies following the deregulation of the private rental market in the 1990s seems to have increased the mobility of private renters (Houston and Sissons, 2012).

Finally, Halfacree and Boyle (1993) note that cultural structures may provide a further macro contextual influence on residential mobility decision-making. This could occur in several ways. Given that Morris *et al.* (1976) and Morris and Winter (1975) argue that households evaluate dwellings and neighbourhoods with reference to socially constructed norms, changes in these norms over time may affect housing preferences and choices. For instance, the ideological promotion of homeownership practised by many Western governments since the 1980s is likely to have impacted upon housing preferences and mobility behaviour over this period (van Ham, 2012).

The cultural macro context may also be relevant for mobility decision-making in other ways. For instance, Fielding (1992b) has postulated that

people's 'ways of seeing' places, migration and migrants may all be conditioned by the recursive interplay between the cultural affiliations of individuals and the cultural attributes of the places in which they live. Empirical support for this contention is provided by Irwin *et al.* (2004), who used US census data to show that places with a strong community and civic structure deter outmigration. Extending Fielding's argument, Cooke (2011) has suggested that the growing residential immobility of Americans may be the result of an emerging culture of 'secular rootedness', produced in part by an ageing population with a growing ability to use daily or virtual mobility as a substitute for relocation. At the wider scale, Halfacree (1995) has called for mobility to also be situated within the context of structures of capitalism and patriarchy. Halfacree's structurationist perspective suggests that situating analyses of mobility decision-making and behaviour within macro contextual structures will not only improve our understanding of why people (do not) move, but will also provide insights into the reproduction of wider social structures.

2.4 The mobility decision-making process

It has long been recognised that the complexity, uncertainty and costs associated with making moving decisions mean that households are often unable to react quickly to perceptions of disequilibrium and housing stress (Littlewood and Munro, 1997). Most moves are therefore preceded by an often lengthy period of deliberation and decision-making (Kan, 1999). During this period household members decide whether to move, evaluate prospective destinations and decide how to adjust to the changes relocation will bring. As a result, Kley and Mulder (2010) argue that it is beneficial to consider relocation as a temporal process (Brown and Moore, 1970). Although qualitative research has explored how the individual decision-making process unfolds over time across different geographical and household contexts (for example Clark, 2009; Livingston *et al.*, 2010; Seavers, 1999; Winstanley *et al.*, 2002), quantitative analyses have often only investigated the correlates of actual mobility events

(Kley and Mulder, 2010). Yet conceptualising mobility as a process which involves considering, planning and finally executing a move implies that it is not sufficient to focus solely upon the moment when actual moves occur (Kan, 1999). Understanding temporal processes of mobility decision-making and how these are influenced by contextual factors is therefore important for our understanding of mobility at both the micro and macro scales.

At the micro scale, developing our understanding of processes of mobility decision-making is necessary to uncover which individuals have what Desbarats (1983a) terms attitude-discrepant experiences of (im)mobility. In this framework, attitude-discrepant moving behaviour occurs when individuals behave in a way which contradicts their previously expressed desire to move or stay. This can be seen in Figure 2.6, which presents a matrix subdividing 'stayers' and 'movers' according to whether or not their moving behaviour is consistent or discrepant with their prior moving desires. Thus, the act of moving can be attitude-consistent if the person previously desired to move, or attitude-discrepant if they previously reported having no desire to move. Ascertaining whether an individual's moving behaviour is attitude-consistent or attitude-discrepant therefore requires tracking the same individuals over time, linking their mobility decision-making to their subsequent moving behaviour. While Figure 2.6 is a valuable tool to conceptualise whether people act in accordance with their moving desires, it is of course worth noting that each cell in the figure hides considerable internal heterogeneity.

Figure 2.6 Attitude-consistent and -discrepant moving behaviours

Moving desire	**Subsequent moving behaviour**	
	Stay	Move
Stay	Desired stayer	Undesired mover
Move	Undesired stayer	Desired mover

Attitude-consistent moving behaviour
Attitude-discrepant moving behaviour
Source: Author

2.4.1 Theorising the mobility decision-making process

A large number of conceptual models have been proposed to explain how individuals make moving decisions in response to disequilibrium and housing stress. Classic examples include Brown and Moore (1970), Rossi (1955) and Speare *et al.* (1975). Most of these behavioural models contend that we can conceptualise the cognitive process of decision-making as comprising a number of separate steps or stages (Kley, 2011). Individuals thinking about moving are thought to typically pass through each of these steps in turn before actually making a residential move. Each decision-making stage can be identified by the expression of a given thought about moving; such as a moving desire, intention, plan or expectation (Sell and De Jong, 1983).

Halfacree and Boyle (1993) are critical of these behavioural models, arguing that they marginalise the agency of potential migrants by reducing them to passive objects responding to the stimuli which are disrupting their housing equilibrium. These authors (1993: 334-337) also criticise behavioural models for imposing an idealised and excessively linear structure on complex decision-making processes, which are situated within the context of everyday life. While these criticisms were undoubtedly valid twenty years ago, recent approaches situating decision-making within the context of the life course tackle some of Halfacree and Boyle's principal concerns. Longitudinal studies investigating who acts upon their expressed thoughts about moving assign a much greater role to the agency of movers than many earlier studies which focused only upon more abstract concepts of stress and disequilibrium. In addition, recent studies investigating how people decide to relocate are more sensitive to the importance of context throughout the mobility decision-making process (De Groot *et al.*, 2011; Kley, 2011).

To provide a holistic representation of how individuals respond to disequilibrium, Figure 2.7 synthesises the insights from previous research to provide a conceptual schema of the mobility decision-making process which engages with Halfacree and Boyle's (1993) main critiques. This decision-making process occurs at the individual scale, but within the wider context of

the person's biographical, household, geographical and temporal situation (Mulder and Hooimeijer, 1999). While the influence of the household context is outlined diagrammatically, macro contextual effects are not. This is to preserve the legibility of the figure, although the macro context is expected to affect every stage of the process in some way (hence the macro context is depicted as enclosing the decision-making process). Figure 2.7 shows that events and gradual processes of change in the life course careers of an individual (or other members of their household) can produce disequilibrium and housing stress. This disequilibrium can arise gradually or suddenly, with implications for how the individual subsequently makes a decision (not) to relocate.

2.4.2 The gradualist model of mobility decision-making

Most decision-making models have focused upon explaining how individuals and households make volitional moves in response to the gradual accumulation of housing stress. Typically, these models take their starting point to be an individual with no desire to move. This desired immobility is implicitly viewed as providing people with two sorts of benefits. Firstly, Fischer and Malmberg (2001) contend that residential immobility helps to produce the high levels of 'insider advantages' which prevent people from considering migration. Insider advantages such as social networks and local knowledges typically accumulate over time and are non-transferable, indicating that desired immobility could provide tangible benefits to individuals over time. Secondly, desired immobility is often viewed as an instrumental force in the (re)production of high levels of place attachment. Livingston *et al.* (2010) contend that such place attachments can be both functional and emotional. While functional attachments form when a place meets a person's lifestyle needs, emotional attachment is expressed when a place contributes to an individual's emotional well-being and desired identity. Both types of place attachment are likely to be important for the overall satisfaction and well-being of individuals.

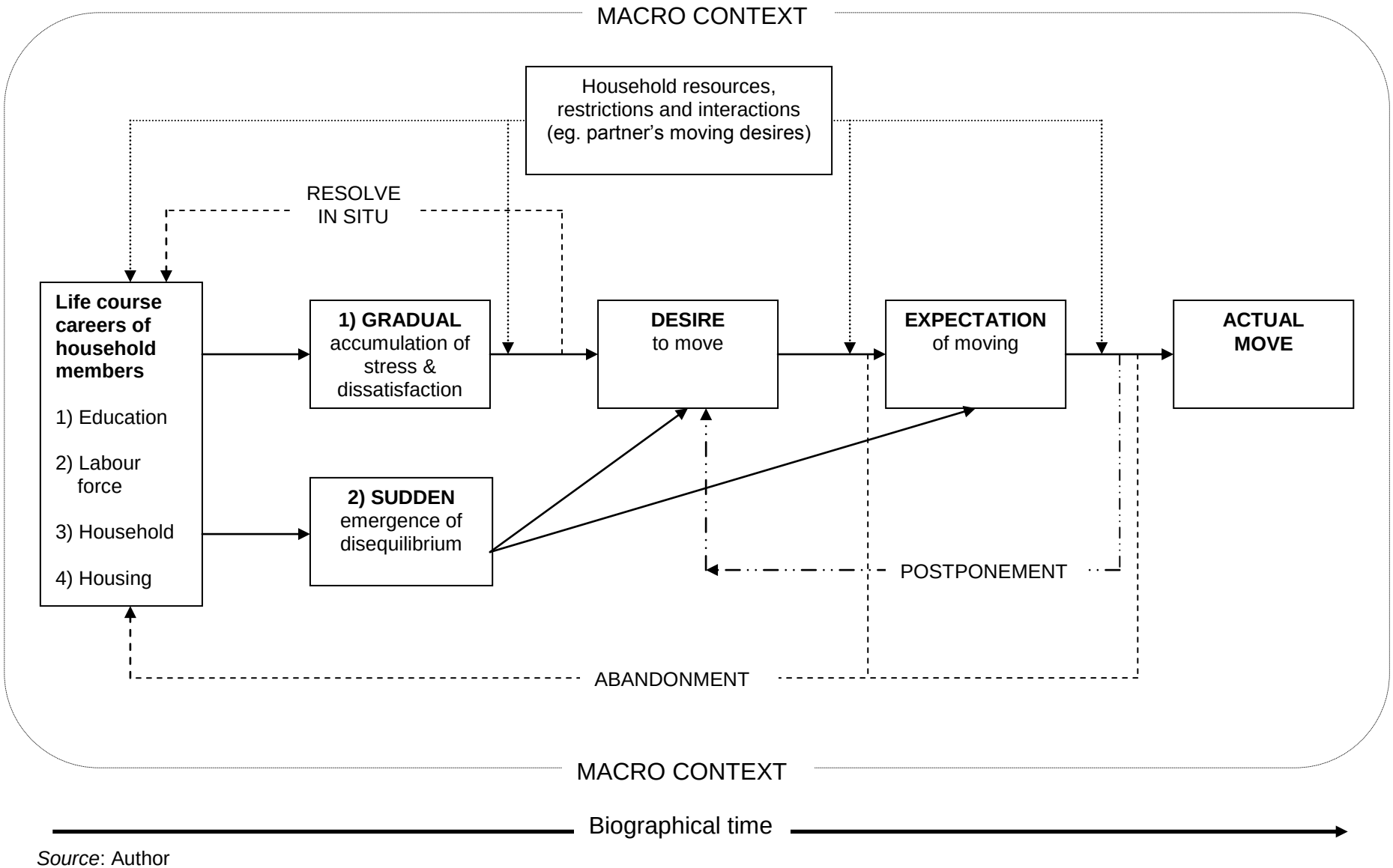
As people are thought to exercise bounded rationality, stress-threshold models typically posit that people only begin to consider moving when they

perceive that housing stress and dissatisfaction have exceeded their personal tolerance threshold (Mulder, 1996). Figure 2.7 shows that this perception of stress is influenced by changes in a person's life course careers, as well as the careers of those they live with. When the level of housing stress exceeds the individual's threshold, they initiate the mobility decision-making process by expressing a desire to move (Deane, 1990; Landale and Guest, 1985; Speare *et al.*, 1975). That expressing a moving desire is the first reaction to rising housing stress was demonstrated by Rossi (1955), who noted that moving desires were more frequently reported by people with complaints about their dwelling.

Expressing a moving desire indicates that individuals have begun to actively consider moving (Speare *et al.*, 1975), as they believe that they could be better off elsewhere. Little consideration is given to the feasibility of actually moving or the alternative housing options available before expressing a desire to move (De Groot *et al.*, 2011). As a result, desiring to move indicates that a person is being 'pushed' out of their current dwelling as it no longer meets their needs and preferences (van Ham and Feijten, 2008). Although sometimes overlooked in the residential mobility literature, expressing a desire to move may not be the only outcome of perceiving an increase in housing stress (see section 2.3.1). Figure 2.7 shows that individuals can also make *in situ* adjustments to their changing circumstances (Deane, 1990; Littlewood and Munro, 1997; Seek, 1983), negating the need to express a moving desire by bringing their current residence more closely into line with their needs.

As moving desires are expressed without consideration of the constraints and restrictions which may impede actual mobility, moving desires can be interpreted as stated preferences for relocation. A large stated preference literature has developed within housing studies (Molin *et al.*, 1996), although few papers have focused explicitly on moving behaviour. Most stated preference studies use hedonic pricing methods to explore how different households value various attributes of dwellings and neighbourhoods, by asking people to choose between hypothetical alternatives (Earnhart, 2002).

Figure 2.7 A conceptual model of the mobility decision-making process



Source: Author

It is argued that the principal value of eliciting stated preferences is that this approach allows individuals to express their underlying (latent) wishes and aspirations, without feeling constrained to what they perceive to be accessible and available. Theoretically, this ought also to be the case for people expressing an unconstrained desire to move.

Rossi (1955) proposed that over time, moving desires can crystallise into moving intentions. In Figure 2.7, the expression of a moving intention occurs after the expression of a moving desire, but before a person expects to move (not depicted). Rossi (1955) contended that progressing from just desiring to also intending to move is more likely if a move is urgently required or if a person is more dissatisfied with their current residence. Adopting De Jong and Fawcett's (1981) value-expectancy model, this implies that people intending to move value moving more highly or expect it to be more likely to bring benefits than those who just express a desire to move. In addition, De Groot *et al.* (2011) argue that restrictions and constraints are considered in more detail before an individual expresses an intention of moving. Only those individuals who judge moving to be feasible are likely to express an intention to act upon their moving desire. This implies that moving intentions may be less closely related to residential satisfaction than moving desires, although several studies confirm the links between dissatisfaction and intending to move (Lu, 1998; Lu, 1999a; Parkes and Kearns, 2003). As constraints may impede people from expressing an intention of moving, this suggests that people intending to move have passed into the second stage of Brown and Moore's (1970) decision-making model by considering possible destinations and actively searching for a new home (McHugh, 1984).

Much of the existing literature examining mobility intentions makes use of two social psychological theories: the Rubicon model and the theory of planned behaviour. Drawing upon the Rubicon model, Kley (2011) contends that progressing from considering to planning migration (which is akin to progressing from desiring to intending to move) involves psychological investment. In this formulation, moving intentions are more costly to abandon than moving desires as they involve a greater level of psychological commitment. While the Rubicon

model provides a useful explanation of why individuals might be reluctant to abandon their moving intentions, the implied irreversibility of 'crossing the Rubicon' is the principal drawback of this approach. Given that deciding to move is a major event in most people's lives, it seems likely that people are risk-averse when it comes to acting upon their moving intentions (particularly if their circumstances change). As a result, individuals may sometimes find it more attractive to abandon their moving intentions rather than take the risk of making a costly and unfulfilling move. This suggests that if individuals have a low expectancy of attaining valued benefits from an intended move, abandoning the moving intention may be a more likely course of action than attempting to relocate.

Both Kley (2011) and Lu (1998) also draw upon Ajzen's theory of planned behaviour to argue that moving intentions are important predictors of subsequent moving behaviour. In Ajzen's (1991) approach, intentions indicate how strongly a person is motivated to move by their expectancy of attaining valued goals (Kley, 2011). These intentions are also affected by how much control a person perceives they have over their moving behaviour (Ajzen, 1991). While the theory of planned behaviour provides a valuable conceptual framework for understanding cognitive decision-making processes, it is arguable that it focuses too heavily upon the individual as an independent and decontextualised actor. Indeed, most of the applications of the theory reviewed by Ajzen (1991) focus upon its pertinence for rather everyday decisions where contextual effects and the influence of others may be quite minor considerations. Although life course theory and decades of mobility research both emphasise the importance of contextualising moving decisions (c.f. Halfacree and Boyle, 1993), neither the theory of planned behaviour nor the Rubicon model provide much detail as to how context may condition the cognitive processes of individuals deliberating whether or not to move. In the theory of planned behaviour, contextual effects on cognitive processes operate solely through their impact upon perceived and actual behavioural control (although Kley's work (2011) develops these ideas more fully). Given these conceptual issues, this thesis does not focus heavily upon moving intentions.

In the gradualist and volitional model of decision-making depicted in Figure 2.7, individuals can progress from expressing a desire to move to also expecting to move (Sell and De Jong, 1983). Making this transition is only possible when the person assesses moving to be likely within the specified timeframe. As a result, only those individuals who are highly motivated and easily able to move are likely to progress from desiring to also expecting to move. This implies that moving expectations are much more constrained pre-move thoughts than moving desires (De Groot *et al.*, 2011). This partly explains why several studies show that dissatisfaction has a somewhat ambiguous association with expecting to move (Bach and Smith, 1977; McHugh *et al.*, 1990).

Those individuals who desire to move but who perceive actually moving to be more difficult or less urgent are likely to take longer to express an expectation of moving. To reduce the cognitive dissonance generated by harbouring an unrealistic desire to move, Figure 2.7 shows that these highly constrained individuals may also abandon their moving desires and adjust their perceptions of housing stress before ever expressing an expectation of moving. Moving desires could also be abandoned at this stage in response to life events and changes in personal, household or contextual circumstances which are perceived to reduce the person's need or ability to move (De Groot *et al.*, 2011; Kan, 1999).

Figure 2.7 suggests that after expressing an expectation of moving, individuals often proceed to actually make the desired move. Household resources and restrictions as well as the macro contextual opportunity structure may, however, still condition whether a person acts upon an expectation of moving (particularly if they overestimate the feasibility of moving). Figure 2.7 shows that if a person is unable to act upon their moving expectations, the move response may be postponed or the desire and expectation of moving abandoned altogether. The abandonment of an expectation of moving is less likely than the abandonment of a desire to move earlier in the decision-making process. This is because people generally only expect to act upon their moving desires when they perceive that actually moving is feasible. In contrast, Kan's

(1999) study shows that people often fail to act upon their expectations of moving when an unanticipated life event (such as a job change) disrupts their prior mobility plans. Thus, unanticipated life events and changes in the household or macro contexts may affect the progress of the mobility decision-making process even at this advanced stage.

2.4.3 Decision-making as a response to sudden life events

Section 2.3.4 argued that moves are not only made in response to gradual increases in housing stress and dissatisfaction. Residential mobility is also often necessary to reduce the disequilibrium triggered by more sudden and potentially unexpected events in the life careers of household members (Clark and Davies Withers, 2007). Life events such as union formation and dissolution, widowhood, childbirth, entering university, changing jobs, becoming unemployed or experiencing a large drop in household income have all been suggested as triggers for residential mobility (Battu *et al.*, 2005; Clark and Davies Withers, 2007; Flowerdew and Al-Hamad, 2004; Mulder and Wagner, 2010; Rabe and Taylor, 2010). In addition, the macro context can exogenously trigger residential moves. The most obvious example of a contextually triggered move occurs when people are 'forced' to relocate due to the demolition of properties during neighbourhood restructuring and renewal programmes (Kleinhans, 2009).

Moving decisions triggered by sudden life events are likely to have a different structure from decisions motivated by a gradual increase in residential dissatisfaction. Focusing upon relationship dissolution, Mulder and Malmberg (2011) argue that residential moves made following the break-up of a partnership are more constrained than other moves in three specific ways. It is arguable that these constraints are also relevant when considering how people make moving decisions in response to other life events. Firstly, Mulder and Malmberg (2011) argue that life events may create a greater *urgency* of moving. This could necessitate a rapid decision-making process, negating the possibility of *in situ* adjustments and constraining the search for a new dwelling. In

addition, *destination choices* may be restricted by the life event trigger. For instance, job changes limit the dwelling choices of individuals to properties within an acceptable commuting distance of their new workplace (van Ham *et al.*, 2001). Finally, life events can constrain mobility adjustments by altering the household's *access to resources*. This is particularly relevant in the context of household formation and dissolution events, with Gram-Hanssen and Bech-Danielsen (2008) demonstrating the importance of resource constraints for moves made after relationship breakdown. Changing access to resources may also be an important constraint for moves triggered by events in the labour force careers of household members.

Figure 2.7 demonstrates that moves made in response to the rapid emergence of disequilibrium can follow the same decision-making pathway outlined in section 2.4.2. Figure 2.7 shows that individuals follow this pathway when an event in their life triggers the expression of a desire to move, which may then crystallise into an intention and expectation of moving. Figure 2.7 shows that the sudden emergence of disequilibrium can however also lead directly to the expression of an expectation of moving, even though the individual does not desire to move (Sell and De Jong, 1983). Expectations therefore differ from desires and to a lesser extent intentions in that they are value-neutral thoughts which simply indicate the person's perception of the probability of moving. As a result, expecting to move can indicate that a person perceives that they have either a very high or very low level of control over their own moving behaviour. Determining whether an expected move is likely to be a positive or negative event therefore depends upon whether the person also desires to move. Whether or not an expected move is desired may also affect the risk of the expectation being abandoned, as it might be anticipated that people will more strongly strive to avoid having to make unwanted moves. As expecting to move does not necessarily indicate that the moving decision is being driven by a desire to achieve valued goals, this also explains the oft-reported ambiguous links between residential dissatisfaction and moving expectations (Bach and Smith, 1977; McHugh *et al.*, 1990).

The literature provides two obvious examples of how sudden increases in disequilibrium could trigger an undesired expectation of moving. Firstly, this could occur following a negative life event such as a relationship breakdown, where either one or both partners must immediately leave the family home (Mulder and Wagner, 2010). Secondly, the needs of an individual's partner may also lead them to perceive disequilibrium and express an expectation of moving, even though this is not desired. This could occur in the case of couples where one individual is a tied mover, sacrificing their own employment prospects for the sake of their partner. Both of these examples highlight the importance of the concept of linked lives for understanding the diverse reasons why people expect to move.

In keeping with life course theories' emphasis on the multidimensional nature of time (Dykstra and van Wissen, 1999), Figure 2.7 highlights that the duration of the mobility decision-making process is biographical and hence specific to a particular decision taken by a particular person. While some people may very quickly act upon their moving desires, for other individuals the decision to move may take much longer. The volume of household scale ties, resources and commitments the person possesses, as well as the macro context within which the decision is being made, are all likely to affect the duration as well as the outcome of the decision-making process. For instance, a single renter with a high income is likely to much more quickly act upon their desire to move than a person in a homeowning nuclear family of four where the children are in school and their partner wishes to stay in their current neighbourhood.

Crucially, the decision-making process outlined in Figure 2.7 is also repeatable within an individual's life course. After becoming independent adults, individuals continuously cycle within this mobility decision-making process. Over time, each person's trajectory over these repeated cycles produces their unique mobility biography. Given that Long (1992) has shown that residential moves are fairly rare events when situated within the context of entire life courses, most people probably spend a large proportion of their lives close to residential equilibrium at the start of the model. Nevertheless, our understanding of how

individuals make moving decisions can be enhanced by situating these decisions within their longer-term experiences of residential (im)mobility.

2.5 Analysing mobility decision-making and actual moving behaviour: Towards a longitudinal perspective

One of Rossi's (1955) main contributions was to empirically investigate the process of mobility decision-making as it unfolds over time. By tracking the moving behaviour of a group of individuals after they had been interviewed, Rossi was able to analyse how strongly people's moving desires and intentions predicted their subsequent moving behaviour. Since this pioneering study, many authors have advocated analysing mobility decision-making within a longitudinal framework (De Groot, 2011; Sell and De Jong, 1978; van Arsdol *et al.*, 1968). Both De Groot (2011) and Desbarats (1983a) contend that a key benefit of this approach is that it enables us to identify individuals who do not behave in accordance with their previously stated desires, intentions or expectations.

Nevertheless, much of our knowledge about the mobility decision-making process comes from cross-sectional research (De Groot, 2011). This is probably due to the abundance of large cross-sectional surveys, as well as the ease of collecting cross-sectional data. For example, van Ham and Feijten (2008) used the Netherlands Housing Demand Survey (2002) to investigate whether people are more likely to desire to move if they live in neighbourhoods with a high proportion of poor or ethnic minority residents. In the UK context, Drinkwater and Ingram (2009) used the British Social Attitudes Survey (1995) to explore whether Britons are less willing to migrate than people in other European countries. In both these examples it was not possible to assess the subsequent moving behaviour of the survey participants. As a result, these studies could not investigate whether those individuals desiring or willing to move actually went on to do so.

To enhance the value of cross-sectional methods, some researchers have used repeated cross-sectional surveys (Hughes and McCormick, 1985). Typically, analyses using repeated cross-sectional data correlate the proportion of individuals thinking about moving at time *t-1* to the proportion observed to have actually moved between *t-1* and *t*. While a useful tool for macro scale analysis, De Groot (2011) demonstrates that relying upon repeated cross-sectional data can lead to overestimates of the strength of the association between moving intentions and actual moving behaviour. This occurs because those people making unintended moves partly counterbalance those who do not act upon their intentions. This inflates the correlation between moving intentions and actual moving behaviour. Sell and De Jong (1983) note that a further problem with repeated cross-sectional designs is that it is difficult to identify period effects on moving behaviour. This makes it impossible to take account of the changing macro context within which moving decisions are being made (Hughes and McCormick, 1985).

This widespread reliance on cross-sectional data has been driven by pragmatic constraints. Until recently, there were few national scale longitudinal surveys available to investigate processes of mobility decision-making as they unfold over time. As these data constraints have gradually been lifted over the last few decades, a growing number of studies have sought to develop our understanding of how people make moving decisions. These longitudinal analyses have confirmed that dissatisfaction with housing and neighbourhood conditions increases the likelihood of expressing a moving desire (Buck, 2000a; 2000b). Buck (2000a) also demonstrates that people who desire to move at year *t-1* are substantially more likely to have moved by year *t* than those who did not express a moving desire (Ferreira and Taylor, 2009). This probably explains why studies linking satisfaction directly to moving behaviour have shown that people who are dissatisfied with their home or who dislike their neighbourhood are more likely to relocate (Diaz-Serrano and Stoyanova, 2010; Rabe and Taylor, 2010).

A variety of longitudinal studies have sought to investigate how strongly moving intentions predict subsequent moving behaviour. In keeping with the

decision-making model proposed in section 2.4, these studies show that expressing an intention to move more strongly predicts subsequent moving behaviour than expressing a desire to relocate (De Groot *et al.*, 2011; Lu, 1998; 1999a; McHugh, 1984; Moore, 1986). Similar conclusions can be drawn from studies linking moving plans to subsequent moving behaviour (Kley and Mulder, 2010; van Arsdol *et al.*, 1968). These two pre-move thoughts can be conceptualised as involving a similar commitment to voluntary relocation, as both are only expressed when an individual has judged actually moving to be possible. De Groot *et al.* (2011) show that the realisation of intentions to move (stay) can be affected by unanticipated life events, which may prevent people from behaving as they had previously intended. This lends further support to the basic model outlined in Figure 2.7.

The decision-making model presented in Figure 2.7 proposes that moving expectations should in turn predict actual moving behaviour more strongly than moving desires or intentions. A few studies have linked expectations of moving to subsequent moving behaviour, in general confirming that there are strong links (Bach and Smith, 1977; Duncan and Newman, 1976; Kan, 1999). Supporting the argument of De Groot *et al.* (2011), Kan (1999) also demonstrates that unexpected life events can create expectation-discrepant behaviours, such as moving without having previously expected to relocate. Overall, this body of longitudinal research has greatly enhanced our understanding of mobility decision-making processes, principally by more rigorously testing the conceptual models proposed by early studies.

2.6 Research gaps and questions

Nevertheless, there are several important aspects of the mobility decision-making process which remain comparatively poorly understood. As a result, this section of the chapter identifies four key gaps in our understanding of mobility decision-making, proposing four sets of research questions to help improve our

knowledge base. These questions are subsequently addressed in turn in the four empirical chapters (chapters four to seven).

2.6.1 Analysing the relations between moving desires, expectations and actual moving behaviour

This chapter has argued that moving desires, intentions and expectations are distinct types of pre-move thought, influenced to varying degrees by residential dissatisfaction, life events and the urgency and feasibility of actually moving (see section 2.4). However as Kley (2011) has argued, empirical research often uses these terms interchangeably or imprecisely given the survey questions which provided the raw data (for instance Kleinhans, 2009; Moore, 1986). Rossi (1955) provides a notable example of this interchangeable use of terms, often blurring the distinction between moving intentions and expectations. This interchangeable and imprecise use of terms has made it somewhat difficult to interpret the findings of some previous studies (Kley, 2011).

More importantly, few studies have explored whether these distinct types of pre-move thought are held in combinations (see Sell and De Jong, 1983 for an exception). This is problematic for our understanding of mobility decision-making and in particular the links between moving desires, expectations and actual moving behaviour. As has been argued in section 2.4.2, whether or not a person expects to act upon their moving desires depends upon how much consideration they have given to actually moving. While individuals who have only just become dissatisfied with their dwelling may not expect to move, those who have been planning a desired move for a long time may express an expectation of fulfilling their moving desires in the near future. Equally, restrictions and constraints may impede some people from expecting to act upon their moving desires (as discussed in the latter subsections of section 2.3). Disaggregating individuals who express a desire to move according to whether or not they also expect to move will therefore enable us to gain insight into the obstacles impeding the realisation of mobility preferences. Considering moving desires and expectations in combinations should also enhance the

predictive power of models of subsequent moving behaviour. This could in turn inform our understanding of the geography of migration flows (section 2.1).

Distinguishing individuals who desire and expect to move from individuals who expect but do not desire to move is also important for our understanding of relocation behaviour. The conceptual model outlined in Figure 2.7 demonstrates that expecting to move can be a volitional response to rising housing stress, as well as a reaction to sudden and possibly negative life events like divorce or redundancy (see section 2.3.4). Distinguishing between these qualitatively distinct types of moving expectation requires knowledge of whether the expected move is also desired. Analysing moving expectations in conjunction with moving desires enables us to separate people who have chosen to expect to move from people expecting to move due to their lack of control over their own relocation behaviour.

To investigate whether moving desires and expectations are distinct types of pre-move thoughts expressed in particular combinations, chapter four addresses the following research questions:

1) What factors influence the combination of moving desires and expectations a person expresses?
2) How do these combinations of pre-move thoughts affect subsequent moving behaviour?

2.6.2 Investigating the linked lives of partners

Much of the literature on migration flows (see section 2.1) analyses the migration of individuals, or alternatively focuses on the movement of discrete and homogenous household units. Yet life course theories (as discussed in section 2.3.4) contend that individuals living together in households can be considered to have linked lives, as one person's life course trajectory affects everyone else they live with (Dykstra and van Wissen, 1999). This is particularly true for partners linked together in couples, as forming a partnership is a life course commitment which can profoundly influence the future choices an individual is free to take (Feijten, 2005). Living with a partner can strongly

influence an individual's control over their relocation behaviour, as partners often actively take each other's needs and preferences into account when making moving decisions through negotiation, bargaining and compromise. These interactions are therefore a fundamental part of the individual scale decision-making model outlined in Figure 2.7. Figure 2.7 shows that the views of a person's partner can strongly influence their mobility decision-making in a variety of ways, from triggering the perception of disequilibrium to influencing the likelihood of a desire or expectation of moving being realised.

Considering partners to be bound together within household units has become a central concept in the family migration literature. Since the publication of Mincer's seminal paper in 1978, many migration studies have explored how couples make moving decisions and how the decision (not) to migrate affects each partner's life course trajectory, in particular their labour market participation and career success (Cooke, 2008a). Both qualitative and quantitative studies of family migration decision-making and behaviour have argued that moving should be seen as a household decision, made through the interactions between both partners in couples (for instance Boyle *et al.*, 2001; Seavers, 1999).

In comparison with the well-developed theories of household decision-making outlined and analysed by family migration studies, the residential mobility literature has neglected to explore how the household context may also affect the decision to move shorter distances for non-economic reasons. As Sell and De Jong (1978: 329) noted over thirty years ago (conceptualising migration in Roseman's (1971) terms as relocation over any distance):

> "Unfortunately, intrafamilial migration decision processes have not been extensively studied, and most research typically chooses one family member as a knowledgeable informant about the whole household. This assumes a certain homogeneity of perceptions within the household, an assumption that should be pursued for possible effect on the household decision process".

This observation is still valid today and a tension persists within the residential mobility literature as to whether it is more appropriate to consider moving to be

an individual or household behaviour. Behavioural models of mobility decision-making (as outlined in section 2.4) unambiguously conceptualise relocation decisions as individual cognitive processes (for example Brown and Moore, 1970; Kley, 2011; Rossi, 1955; Speare *et al.*, 1975), often assuming that each member of a household shares the same thoughts about moving (Sell and De Jong, 1978). This seems somewhat unrealistic given that housing stress may be perceived differently by the various members of a single household, all of whom have their own life course needs and personal desires and aspirations.

Barring studies by Buck (2000a), Ferreira and Taylor (2009) and Rabe and Taylor (2010), residential mobility research has not explored whether partners do share perceptions of housing stress. As a result, few studies have investigated whether these (dis)agreements affect the articulation and realisation of moving desires. It is important, however, to situate our understanding of individual decision-making processes within the context of the household, as household ties may have a powerful influence on an individual's ability to act in accordance with their moving desires (Mulder and Hooimeijer, 1999). This issue is investigated in chapter five. This chapter seeks to answer the following research questions:

3) Which couples are most likely to disagree about whether moving is desirable?
4) How do these partner disagreements affect the subsequent moving behaviour of couples?

2.6.3 Exploring the biographical dimension of mobility decision-making

In addition to situating decision-making processes within the context of the household unit, it is also important to consider the *temporal* context within which such decision-making occurs (see section 2.3.4.1). This was recognised by Rossi (1955), who concluded his book with the observation that a person's moving behaviour is likely to be influenced by their past experiences of residential (im)mobility. Rossi's argument that mobility decision-making should

be understood as a historically contingent process is shared by life course theories, which advocate situating events within the temporal contexts of individual biographies and macro contextual structures (Dykstra and van Wissen, 1999; Mulder and Hooimeijer, 1999).

Although many studies of mobility decision-making and behaviour use the life course approach as a theoretical framework, empirical analyses rarely situate moving decisions within a long-term biographical context (Findlay and Li, 1997). Returning to Figure 2.7, this means that few studies have investigated how cycles of mobility decision-making may unfold over the long-term trajectory of individuals' life courses. This is primarily due to the limited availability of suitable data, as until recently few panel surveys had been collecting data for a long enough period to permit the analysis of long sections of individual life courses. In addition, advances in statistical software and methodological techniques (such as sequence analysis) have only recently enabled this type of quantitative research.

As a result of these practical constraints, most studies use only a few waves of longitudinal data gathered over a short period of time to link moving desires, intentions or expectations to subsequent moving behaviour (eg. De Groot *et al.*, 2011; Kan, 1999; Lu, 1998; Lu, 1999a). This 'snapshot' approach means that little is known about the longer term relationships between pre-move thoughts and actual moving behaviour. This is problematic, as life course theories emphasise that the temporal ordering of events and the duration spent in different states conditions how they are experienced (Bailey, 2009). Both temporal ordering and state duration are important considerations for our understanding of the links between moving desires and actual moving behaviour. For example, the meaning of expressing a desire to move in a given year is likely to differ depending upon whether it is expressed for the first time or for the tenth year in a row. Equally, expressing a desire to move carries a different meaning if expressed before or after a residential move. It therefore seems valuable to explore *mobility biographies* (Bailey, 2009), focusing on how moving desires and actual moving behaviour relate over long periods of biographical time to form life course trajectories. This may enable the

identification of factors associated with repeatedly engaging in attitude-discrepant moving behaviour (Figure 2.6), such as persistently failing to act upon a desire to move.

To bring the empirical analysis of mobility decision-making more closely into line with the biographical approach advocated by life course theories, chapter six seeks answers to the following research questions:

5) How are moving desires and actual moving behaviour sequenced over individuals' long-term life course biographies?
6) How are these mobility biographies influenced by the long-term trajectories of other life course careers?

2.6.4 Analysing desire abandonment and the duration of wishful thinking

Most longitudinal studies of mobility decision-making investigate whether people who expressed a given thought about moving at year *t-1* have actually moved by year *t* (see Buck, 2000a; De Groot *et al.*, 2011; Kan, 1999 for examples). While the conceptual issues surrounding this reliance on a snapshot approach have been outlined above and are addressed in chapter six, failing to adopt a longer term perspective also has specific implications for the empirical analysis of decision-making. Despite life course theories' emphasis on the duration of states, little is known about *how long* people continuously desire to move for before either relocating or altering their expressed relocation preferences.

This lack of interest in the temporal dimension of mobility decision-making is surprising for both conceptual and methodological reasons. Conceptually, many studies have argued that deciding to relocate is often a time-consuming decision (Kan, 1999), particularly for individuals with high levels of life course ties and commitments for whom moving is more costly and disruptive (for instance dual-career couples and families with children). This extended decision-making process is neglected by adopting a snapshot approach. Behaviours which appear to be attitude-discrepant in a short term analysis (such as failing to act upon a desire to move in a given year) may be

attitude-consistent if a longer term approach is adopted (for instance if it takes a person a few years to realise their desire to move). The focus on analysing year-to-year transitions is also surprising given the enduring popularity of event history analysis throughout the social sciences as a technique for analysing life course trajectories (Aisenbrey and Fasang, 2010). As yet, comparatively little use has been made of event history modelling for the analysis of mobility decision-making, despite the growing availability of suitable data.

Longitudinal studies linking moving desires to subsequent moving behaviour have not only neglected the temporal dimension of decision-making, but have also focused exclusively on who realises their pre-move thoughts. Figure 2.7 shows that after expressing a moving desire, individuals must eventually either fulfil or abandon this desire. Few studies have explored the abandonment of moving desires, even though the risk of abandoning a moving desire can be understood as continuously 'competing' with the risk of it being realised. Ignoring the abandonment of moving desires is surprising, as this is likely to be an important means for individuals to combat the cognitive dissonance induced by an inability to make a desired move (section 2.4). While life course ties, commitments and access to socio-economic resources may configure how long it takes an individual to realise their moving desires, these factors may also influence the likelihood of abandoning rather than fulfilling a moving desire. Developing our understanding of the length of time an individual takes to either fulfil or abandon their moving desires should therefore help to develop our understanding of the restrictions and constraints which impede people from making residential adjustments. This should, in turn, enhance our understanding of the heterogeneous processes of residential immobility, at a time when it appears that people may be becoming less residentially mobile (see Cooke, 2011; Fischer, 2002). Section 2.2 argued that this is a major advantage of conducting a micro rather than macro scale analysis of moving behaviour.

As a result, chapter seven develops the long-term approach introduced in chapter six, focusing specifically upon the temporal dimension of the mobility

decision-making process. Overall, this chapter seeks to answer the following research question:

7) What factors influence the length of time it takes an individual to either fulfil or abandon a moving desire?

Answering the research questions outlined above will provide insight into the contextualised links between moving desires and subsequent moving behaviour, thereby fulfilling the overall objective of the thesis. While a growing number of longitudinal analyses have linked moving desires, intentions or expectations to subsequent moving behaviour, few studies have sought to integrate these insights into a comprehensive behavioural schema. By providing a longitudinal conceptualisation of how people make decisions (not) to move, Figure 2.7 contributes to our understanding of how relocation is both a temporal as well as a spatial process (Kley and Mulder, 2010). Figure 2.7 also seeks to move beyond the strictly cognitive perspective on mobility decision-making adopted by psychological theories (eg. Kley, 2011). As Figure 2.7 explicitly theorises how the household and macro contexts affect mobility decision-making, the figure engages more completely with Halfacree and Boyle's (1993) critique that behavioural schemas ignore how mobility decisions are shaped by the biographical and cultural contexts within which they occur.

Analysing the links between moving desires and subsequent moving behaviour provides a means to evaluate the extent to which people are able to move when they would like to do so (c.f. Desbarats, 1983a). As a result, this approach enables us to investigate how events, restrictions and constraints in the life courses of individuals can condition and constrain their mobility behaviour. This is important, as an inability to use mobility as a strategy to attain valued goals may have negative impacts on the well-being and prosperity of individuals. Assessing the extent to which people behave in accordance with their moving desires is also important for our understanding of the operation of housing and labour markets. As the mobility of individuals enables people to 'match' themselves to suitable job and housing opportunities (Wheaton, 1990),

it is important to understand why people may not be able to act upon their spatial mobility aspirations.

Chapter 3

Research design

The previous chapter concluded by outlining the four sets of research questions which guide the empirical portion of this thesis (chapters four to seven). It was contended that answering these questions requires adopting a longitudinal perspective, linking individuals' moving desires to their subsequent moving behaviour. As there are many possible ways to conduct such an analysis, this chapter contains an overview of the philosophical and methodological considerations which were most relevant for the design of this study.

The chapter begins by arguing that the central objective of this thesis could be best met through the use of quantitative methods. Next, the chapter reflects upon the merits and weaknesses of different types of numerical longitudinal data. After arguing that prospectively gathered longitudinal data were most suitable for this thesis, the chapter evaluates several sources of such data available to researchers in the United Kingdom. The chapter then argues that British Household Panel Survey (BHPS) data provide a unique opportunity to investigate the links between moving desires and subsequent moving behaviour. As BHPS data are then used in each of the four empirical studies, the chapter concludes with some detailed description and evaluation of the BHPS. This section provides a greater critical interrogation of the strengths and challenges of using BHPS data than could be included in the four papers. As with the conceptual discussion articulated in chapter two, the philosophical and methodological reflections which follow are therefore relevant across all four empirical studies (see Figure 1.2).

3.1 Philosophy and methods

3.1.1 The value of quantitative methods

Quantitative studies of migration and residential mobility have a distinguished pedigree within population geography, stretching back to the late nineteenth century work of scholars such as E.G. Ravenstein. The quantitative tradition was highly influential throughout much of the twentieth century, and many of the classic theories of mobility formulated at this time were based around some form of quantitative analysis (reviewed in Öberg, 1995). Large numbers of population geographers and spatial demographers continue to follow this tradition today, arguing that numerical analysis offers a powerful way to produce rigorous knowledge about social processes at broad temporal and geographical scales (Findlay, 2003). Researchers interested in mobility are often attracted to quantitative techniques because they are argued to offer insights into causality, while producing generalisable, replicable results (Bryman, 2008).

Quantitative methods provided the most appropriate way to fulfil the objective of this thesis (as set out in chapter one). This is because quantitative methods enable a deep engagement with aspects of the epistemological and conceptual foundations of social and life course theories which cannot be studied with qualitative techniques (Findlay and Li, 1999). That this is a comparatively rarely discussed advantage of quantitative methods may be because many geographers use misplaced philosophical arguments to reject all forms of numerical analysis. While McKendrick (1999) shows that it is erroneous and perhaps dangerous to unquestioningly 'read-off' ontological and epistemological stances from methodological approaches (Findlay and Li, 1999), it remains common for many researchers to assume that all numerical analysis equates to naïve 'positivism'. Wyly (2009) extends this argument, suggesting that many researchers reject quantitative techniques as these are still associated with the conservative elitism of 1950s and 1960s style spatial science. Yet by explicitly separating methods from their essentialised links to ontology and epistemology, McKendrick (1999) shows that there is space for

quantitative techniques to be critically employed outside of a rigidly positivist framework. If methods have no predetermined links to particular philosophies of knowledge, it follows that different researchers can use a variety of quantitative techniques in radically different ways (McKendrick, 1999). Separating methods from their assumed ties to particular philosophical stances implies that we must also avoid equating qualitative methods with political radicalism and 'postpositivist' philosophies, such as humanism or post-structuralism (Ellis, 2009; Wyly, 2009).

By rejecting the assumption that all quantitative analyses must be rigidly positivist, it quickly becomes clear that quantitative methods provide a powerful means to engage with new social theories while retaining a broadly 'scientific' approach to research. In particular, quantitative analysis can help us to use structuration theory to understand how people make moving decisions (Findlay and Li, 1999), as advocated in several important papers by Halfacree (1995; 2004; Halfacree and Boyle, 1993). In essence, structuration theory seeks to resolve the agency-structure debate by positing that agency and social structures are bound up together in a cycle of continuous coproduction (Giddens, 1984). While the exercise of agency is affected by the social context in which it occurs, this enactment of agency in turn contributes to the reproduction and reconfiguring of social contexts (Halfacree, 1995). As quantitative techniques are capable of analysing large volumes of data gathered in a range of times and places, Findlay and Li (1999) suggest that quantitative analysis is a particularly valuable way to analyse agency-structure relations at the population scale, by studying the generalisability of particular processes.

These insights suggest that quantitative techniques enable the detailed analysis of how people make moving decisions within different life course contexts. This is important in light of the thesis objective (chapter one), as quantitative methods provide a unique way to analyse how the biographical, household and broader spatio-temporal contexts are linked to mobility decision-making. Analysing how people make moving decisions within a biographical context requires tracking people for long periods of time. As rich numerical data on the life courses of large numbers of individuals have been gathered for

decades by governments and research institutions, such data provide a unique way to analyse how people express and subsequently (fail to) act upon moving desires over their life course biographies. In essence, numerical longitudinal data can be used to construct 'photo albums' of individual life courses by placing in order a series of numerical 'snapshots' taken repeatedly over an individual's lifetime (Gershuny *et al.*, 1994). It would not be possible to gather or indeed analyse this volume of data in a qualitative study. As a result, quantitative techniques provide a valuable means to explore the biographical dimension of mobility decision-making, while simultaneously providing insights into the generality of particular biographical experiences.

Numerical analysis is also a powerful tool for exploring how people exercise their agency within the context of household structures. While intensive qualitative studies can shed light into the processes which drive the mobility decision-making of specific households (for instance Bailey *et al.* (2004) and Seavers (1999)), quantitative analyses can reveal broader patterns at the population level. This is important, as conducting large scale analyses of how people make moving decisions within different household contexts can shed light into how context and agency interact to (re)produce social structures (for instance Halfacree (1995) identifies clear links between mobility decision-making and the structuration of patriarchy). The ease of studying mobility decision-making within a range of times and across a range of spaces also makes quantitative analysis an attractive way to study how broad spatial and temporal factors affect the links between moving desires and subsequent moving behaviour. Fundamentally, conducting quantitative analyses of richly detailed longitudinal data enable us to study how mobility decision-making is a contextualised process, thereby engaging with theory to fulfil the thesis objective.

3.1.2 Qualitative analysis: Studying emotions and identities

Since the cultural turn in the 1990s, much has been written about the limitations quantitative methods also impose upon what is knowable about social

processes. While it is true that these limitations should not lead to the knee-jerk rejection of all quantitative analysis, it is important to recognise that qualitative methods do open up avenues of research which cannot be easily explored using numerical data. As qualitative methods enable the study of emotions and feelings, they are therefore ideal for projects investigating how residential (im)mobility is an emotional and cultural process (Fielding, 1992b). For example, interviews were useful for Levy *et al*. (2008) and Munro and Smiths' (2008) analyses of how people make home purchase decisions, as well as Clark's (2009) exploration of how people experience moving through deprived neighbourhoods. In addition, McHugh (2000) has argued that the experience of moving can be profitably disentangled using ethnographic methods. A variety of qualitative techniques can therefore be harnessed to explore how mobility decision-making is influenced by 'practical consciousness' and the taken-for-granted influences of context (Findlay and Li, 1997; Halfacree and Boyle, 1993).

Similarly, qualitative methods are of value for research seeking to investigate how residential (im)mobility is implicated in the social construction of identity. For instance, Gutting (1996), Mason (2004) and Winstanley *et al.* (2002) all used in-depth interviews to analyse how people construct relational identities when narrating their residential mobility biographies. While these studies demonstrate how qualitative methods can usually communicate the 'voices' of individuals more fully than quantitative research, intensive qualitative methods cannot easily explore and represent how these voices fit together into an aggregate population scale picture. As a result, it would not be possible to use qualitative techniques to study the general links between moving desires and subsequent moving behaviour across a wide range of life course and socio-spatial contexts. This means that while qualitative methods provide an important way to address many research questions, they cannot fulfil the specific research objective set out in chapter one.

3.1.3 Towards a postpositivist quantitative analysis

Given the above discussion, this thesis addresses the research objective using quantitative methods. Fundamentally, quantitative methods enable a broader analysis of how people make moving decisions in different contexts than would be possible using qualitative methods. While quantitative and qualitative methods are not mutually exclusive and may in some cases be complementary (Findlay and Li, 1999; McKendrick, 1999), a solely quantitative approach provided the most effective way to fulfil the research objective within a three-year period.

Nevertheless, it is important to be mindful of the work of social theorists and postpositivists in order to produce quantitative knowledge which engages with their most salient critiques (Ellis, 2009). As Findlay (2003) has noted, it is particularly important to recognise that numerical data are not objectively produced in a contextual vacuum. Instead, data are constructed in a particular way by parties pursuing particular interests within a given social context. As the state is often involved in the construction of the numerical datasets which are useful for this type of project, it is important to be critical of how these data are constructed, while also remaining aware of what data have not been gathered. As a consequence, it is essential to clearly detail how data have been manipulated, categorised and analysed when reporting results. Findlay (2003) also notes that quantitative researchers need to be reflexive about their own positionality in the research process, rather than reverting to the traditional position of the supposedly 'objective' spatial scientist. By engaging with the above challenges postpositivists have posed to quantitative researchers (Ellis, 2009; Wyly, 2009), it is possible to produce more sensitive and critical numerical knowledge about how people make moving decisions within different life course contexts.

3.2 Longitudinal approaches

Using quantitative methods to address the thesis objective (chapter one) by answering the four sets of research questions (chapter two) required an appropriate source of numerical longitudinal data. At the most general level, Taris (2000:1) defines longitudinal data to be data gathered about a set of research units (such as individuals, firms or countries) over a series of time points. Taris notes that there are several types of longitudinal data, not all of which are gathered by actually following research units through time. As a result, it is important to critically evaluate why BHPS data were used in this thesis by exploring the strengths and drawbacks of using various types of longitudinal data to analyse mobility decision-making.

3.2.1 Retrospective surveys

One way to quickly gather large volumes of longitudinal data is through a retrospective survey. Retrospective surveys involve interviewing a sample of participants, asking them to recall and date particular events in their life histories (Taris, 2000). Feijten (2005) comments that this approach is cost-effective and circumvents the problems of participant attrition and wave non-response which afflict most prospective surveys. This latter advantage is especially relevant for mobility research, as the selective attrition of movers is a common feature of most panel surveys. As a result of these advantages, studies by Davies and Flowerdew (1992), Feijten (2005) and Mason (2004) all make use of various types of retrospective data to examine residential mobility biographies.

Few studies have, however, used retrospective data to analyse the mobility decision-making process. Several factors reduce the value of retrospective techniques for this type of study. Most significantly, the quality of retrospective data is highly dependent on participants being able to accurately recall and date events they have experienced (Taris, 2000). While major life events such as marriage, childbirth or bereavement may be fairly accurately

recalled and dated, it is nearly impossible to recall subjective judgements such as feelings or opinions which are constantly in flux. Hence, it is intuitively problematic to ask people whether they desired or expected to move five or ten years ago, even if they can accurately remember when they actually made residential moves. It is also difficult to gather socio-economic data (for instance about a person's income) for similar reasons (Feijten, 2005).

A second problem with using retrospective data to analyse mobility decision-making is the danger of post-hoc rationalisation. Post-hoc rationalisation occurs when people reinterpret their past in light of their knowledge of subsequent events. This means that even if respondents could accurately recall their prior moving desires or expectations for a retrospective survey, there is a danger that these would be filtered and reinterpreted before being reported in order to present a more coherent narrative to the interviewer. It might be expected that people would seek to downplay attitude-discrepant behaviours (such as periods spent desiring to move but without actually doing so), in order to demonstrate that they were in control of their life course trajectory. This is likely to severely bias our understanding of decision-making processes and in particular the factors preventing people from acting in accordance with their moving desires.

Retrospective surveys also have a number of weaknesses which impact upon their effectiveness for all types of social enquiry. As retrospective data collection gathers information about the past, it is impossible to gather a large volume of data from younger people, who, by definition, have shorter life histories. This creates an age bias in the volume of data generated. More generally, issues of telescoping are known to affect people's ability to recall the dates of events (see Taris (2000) for detailed discussion). When combined, these considerations indicate that while retrospective analysis can be valuable for the study of life course careers, it is perhaps less useful for the analysis of mobility decision-making.

3.2.2 Prospective data collection

These weaknesses of retrospective surveys suggested that prospectively gathered longitudinal data were more suitable for this thesis. Gathering prospective longitudinal data involves taking repeated observations on a group of units (henceforth people) as these are tracked over a period of time (Taris, 2000). As noted by Taris (2000), a prospective approach typically generates a greater volume of higher quality data than a retrospective survey. This is because data are gathered about a person's current situation at periodic intervals as they move through time, negating the main problems generated by relying on people to recall information.

To harness the power of prospective longitudinal data, many researchers have conducted their own panel surveys to link mobility decision-making to subsequent moving behaviour. This was a particularly common approach until the 1990s (Bach and Smith, 1977; Landale and Guest, 1985; Lee *et al.*, 1994; Rossi, 1955; Sell and De Jong, 1983; Speare *et al.*, 1975), although the flexibility this approach affords means that custom designed panel surveys remain popular (eg. Kley and Mulder, 2010). Many of the early studies based around the primary collection of panel data have had an enormous impact upon our understanding of the mobility process, although much of this research was conducted within the specific context of the mid- to late-twentieth century United States. As Americans are known to have been consistently more mobile than Europeans, the empirical findings from these early studies may therefore not be particularly informative guides for predicting mobility decision-making and behaviour in very different temporal and spatial contexts.

Despite the flexibility offered by conducting a purpose designed panel survey of mobility decision-making, this approach carries a number of drawbacks. These are primarily caused by the pragmatic need for researchers to minimise the costs of collecting their own data. Many of these weaknesses become apparent through a critical reading of the older residential mobility literature. For example, the need to minimise costs means that researchers can often sample only a few hundred individuals (eg. Bach and Smith, 1977; Lee *et*

al., 1994; Rossi, 1955), as conducting large surveys and tracking the movements of a large number of people quickly becomes extremely expensive. In addition, it takes a considerable amount of time for a prospective longitudinal survey to accumulate the data necessary to permit analysis (Taris, 2000). This probably explains why much of the early literature only examined whether people thinking about moving at time *t-1* had actually done so by *t*. These twin weaknesses indicated that gathering primary data using a purpose designed panel survey might not be the most efficient way to answer the research questions.

3.2.3 Using prospectively gathered secondary data

There has been a rapid increase in the use of prospective longitudinal data throughout the social sciences over the last few decades. This has been enabled by the massive investments made in longitudinal resources by governments across the Western world. In the UK, there are many sources of secondary longitudinal data which are publically available to the research community. These can be usefully subdivided into linked administrative datasets and panel surveys. While these two types of dataset possess their own particular advantages and weaknesses, they both share several generic advantages over primary longitudinal data. Firstly, they both contain much larger samples of individuals than could be contacted in a primary survey. This provides a greater level of statistical power in quantitative analyses. Secondly, these individuals have often already been tracked over a long period of time. This is of intrinsic value for empirical research, as analysing the temporal ordering of events or the duration of states typically requires data to have been gathered at regular intervals over a long period of time. The long duration of secondary studies is also of practical value to researchers, as data analysis can begin immediately without the period of data collection required when conducting a primary survey.

In the UK, the ONS Longitudinal Study of England and Wales (LS), the Scottish Longitudinal Study (SLS) and the Northern Ireland Longitudinal Study

(NILS) are examples of longitudinal datasets created using administrative records. Each of these studies is based around the linked census returns of a sample of several hundred thousand individuals. Information on 'vital events' (such as births, deaths and major health events) has been merged onto these linked census records to enhance the range of research topics which can be studied. The principal advantages of these studies are the huge sample sizes and the considerable length of time over which sample members have been tracked. For example, the LS currently contains a 1% sample of the population of England and Wales tracked for up to thirty years (1971-2001). This volume of data enables the statistical analysis of subgroups not normally present in sufficient numbers in secondary datasets (for instance specific ethnic or occupational groups). The records of sample members are also geocoded at a fine spatial scale, facilitating the use of contextual variables.

Nevertheless, these studies are of limited value for addressing the overall aim of this thesis. A key weakness of these studies is the large time gaps separating observations. As the studies are based around linked census returns, little is known about individuals in the periods between each decadal census. More problematically for this thesis, these studies also contain very limited subjective data. This is because the datasets are generated using linked administrative records, rather than through direct surveys of sample members. This means that none of these studies contain information on whether a person desires to move, although there is some information on the actual mobility behaviour of sample members[2]. As a result, the LS, SLS and NILS appeared to be inappropriate for this project.

The need for subjective data can be fulfilled using data collected by panel surveys. According to Taris (2000), panel surveys involve collecting data by repeatedly interviewing a 'panel' of respondents over a period of time. One specific type of panel survey is the cohort study. Cohort studies are essentially panel surveys where sample members are recruited based upon some shared

[2] These restrictions do not necessarily apply in other European countries. In some countries it is now possible to study mobility decision-making and subsequent moving behaviour by merging survey responses onto administrative data from a continuously updated population register (see Mulder, 2007 for discussion and De Groot *et al.*, 2011 for an example).

characteristic (often date of birth) (Taris, 2000). The UK has a rich tradition of gathering longitudinal data through national scale birth cohort studies, stretching back to the 1946 National Survey of Health and Ageing. Further birth cohorts have been tracked since 1958 (National Child Development Study), 1970 (British Cohort Study) and 2000-2001 (Millennium Cohort Study). These cohort studies provide a wealth of data about sample members. This data is gathered in a variety of ways, ranging from direct interviews to the indirect use of administrative medical records.

Nevertheless, the cohort studies were not suitable sources of longitudinal data for this thesis. The Millennium Cohort Study was unsuitable as sample members are still dependent children who lack control over their own mobility behaviour. As the other three cohort studies have only contacted individuals at widely spaced intervals, these studies do not allow the unfolding relationships between moving desires and mobility behaviour to be tracked closely over time.

3.3 Introducing the British Household Panel Survey

This issue of the temporal spacing of observations can be addressed using secondary data from household panel surveys. These select a sample of households in a given year and then track and re-interview the members of these households at regular intervals as they move through life. While cohort studies typically focus upon the life course trajectories of a group of individuals with some shared attribute, household panel studies aim to follow the unfolding life courses of a more diverse group of individuals.

Over the last few decades, there has been considerable investment in creating and maintaining large scale household panel surveys in various Western countries. Some of the most prominent examples are shown in Table 3.1. In the UK, the British Household Panel Survey (BHPS) is the longest running and therefore most suitable source of secondary panel data for this thesis. Although the UK is now home to *Understanding Society*, the largest national panel study in the world, at the time of writing only two waves of data

from this survey are currently available. While this survey will be of great value in a few years time, the long duration of the BHPS made it more suitable for this research project.

Table 3.1 Basic attributes of four major household panel surveys

Panel survey	Country	Date of inception	Initial sample size[5]
Panel Study of Income Dynamics (PSID)[1]	USA	1968	4,802 families
German Socio-Economic Panel Study (GSOEP)[2]	Germany	1984	12,245 individuals in 5,921 households
British Household Panel Survey (BHPS)[3]	UK	1991	10,264 individuals in 5,538 households
Household, Income and Labour Dynamics in Australia Survey (HILDA)[4]	Australia	2001	13,969 individuals in 7,682 households

Sources: [1]PSID (2012); [2]Haisken-DeNew and Frick (2005); [3]Taylor *et al.* (2010); [4]Summerfield *et al.* (2011)
[5] For PSID this is defined as n families sampled in 1968. For GSOEP, BHPS and HILDA the figures refer to the number of households and individuals who responded during the first survey sweep.

The BHPS began in 1991 and was designed to survey a nationally representative sample of households living in Britain (see Taylor *et al.*, 2010 for more detailed discussion of the procedures outlined in this section). Areas of Scotland north of the Caledonian Canal and Northern Ireland were not sampled during this initial survey sweep. Using the Postcode Address File, 250 postcode sectors were selected as the Primary Sampling Units (PSUs) within which individual households would be contacted. This selection was achieved using a complex systematic stratification procedure.

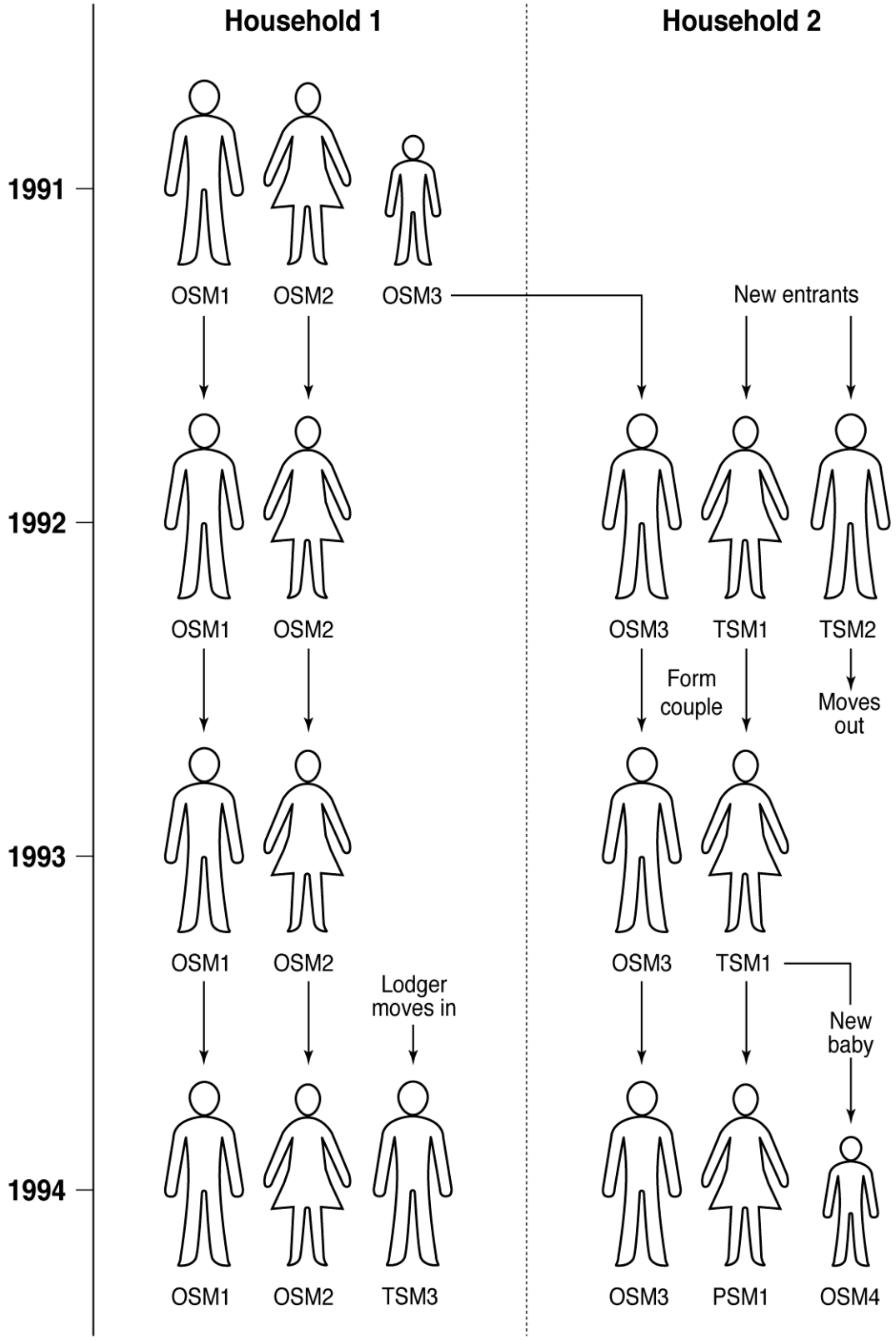
After selecting the 250 PSUs, it was intended that the BHPS would sample an average of 33 delivery points within each PSU (ie the target sample consisted of 8,250 delivery points). In practice, 8,166 delivery points were selected using the systematic sampling procedure detailed in Taylor *et al.* (2010). After selecting the delivery points, it was necessary to select particular households to be interviewed. The BHPS defines a household to be "one person living alone or a group of people who either share living accommodation

OR share one meal a day and who have the address as their only or main residence" (Taylor *et al*., 2010: 136). The selection of households at each delivery point was made by the fieldwork interviewer on the basis of a detailed set of guidance procedures. Non-residential addresses and institutions were excluded from consideration during this initial survey sweep. Interviews were then sought with all adult household members within each selected household. As can be seen in Table 3.1, interviews were achieved with 10,264 individuals in 5,538 households in 1991. These were very favourable response rates.

Individuals enumerated as living in a household contacted in 1991 have since been tracked and re-interviewed each subsequent year until 2008-2009 (wave 18), when the BHPS sample was absorbed into *Understanding Society*. While Original Sample Members (OSMs) have been consistently tracked through time, new individuals can also enter the BHPS sample at later survey sweeps in one of two ways. Firstly, new babies born to an OSM automatically become OSMs themselves. Secondly, people can also enter the sample as Temporary Sample Members (TSMs) when household composition changes mean that they are observed to be living with an OSM. TSMs are, however, only followed for as long as they continue to reside with an OSM. TSMs can permanently enter the BHPS sample as Permanent Sample Members (PSMs) if they share parenthood of a new baby with an OSM. Figure 3.1 provides a diagram which illustrates how these following rules operate using a group of hypothetical individuals.

Significant extra samples have also been added to the BHPS over its long history. Between waves 7 and 11 (1997-2001), the UK respondents to the European Community Household Panel survey (ECHP) were absorbed into the BHPS sample. More significantly, the BHPS has also been enlarged with 'booster' samples on two occasions. At wave 9 (1999), several thousand extra households from Wales and Scotland were added to the BHPS sample to facilitate comparative analysis of the impacts of devolution (Taylor *et al.*, 2010). At wave 11 (2001), two thousand extra households were also added from Northern Ireland. Individuals in households contacted at the initial wave of the booster sample became OSMs and the usual following rules applied thereafter.

Figure 3.1 BHPS sample tracking procedures and naming conventions



Source: Author, based on descriptions in Taylor *et al.* (2010)

In addition to possessing a large sample surveyed for a long period of time, the BHPS possesses four extra features which made it an eminently suitable source of data to answer the four research questions. Most importantly, the BHPS is the only long running panel survey in the UK to have consistently asked individuals about their moving desires. This information has been gathered from every adult sample member since 1991 through the answer given to the question "*If you could choose, would you stay here in your present home or would you prefer to move somewhere else?*" As Buck (2000b) has noted, the phrasing of this question guides respondents to indicate whether they wish to move, regardless of whether or not they think it would be possible to actually relocate. This means that the responses elicited by this question can be considered to be moving desires, rather than moving intentions or expectations (see section 2.4). In addition to gathering information on moving desires, the BHPS also records whether or not individuals have actually moved in a given year. These twin variables are essential to fulfil the objective of this thesis.

Another valuable characteristic the BHPS shares with many panel surveys is the high frequency of survey sweeps. By contacting individuals at roughly annual intervals, the amount of time where little is known about sample members' attributes, attitudes and behaviours is considerably reduced. Frequent contacts also enable us to more accurately date when individuals experience particular life events or transitions, for instance gaining or losing a job. This enhances the value of the BHPS relative to other panel data resources such as the cohort studies.

The richness of the contextual data gathered at each annual interview provides a third reason why the BHPS is a valuable resource for analysing the links between moving desires and subsequent moving behaviour. As Berthoud (2000) has noted, the BHPS gathers data from sample members on a huge range of topics, ranging from labour force participation and household incomes to housing conditions and health. One particularly significant feature of the BHPS is the large amount of highly subjective data which is gathered each year. For the purposes of this study, the subjective data gathered about a person's perception of their dwelling and neighbourhood conditions was

particularly invaluable. Overall, the richness of the data collected by the BHPS enables us to track the changing life careers of sample members in considerable detail.

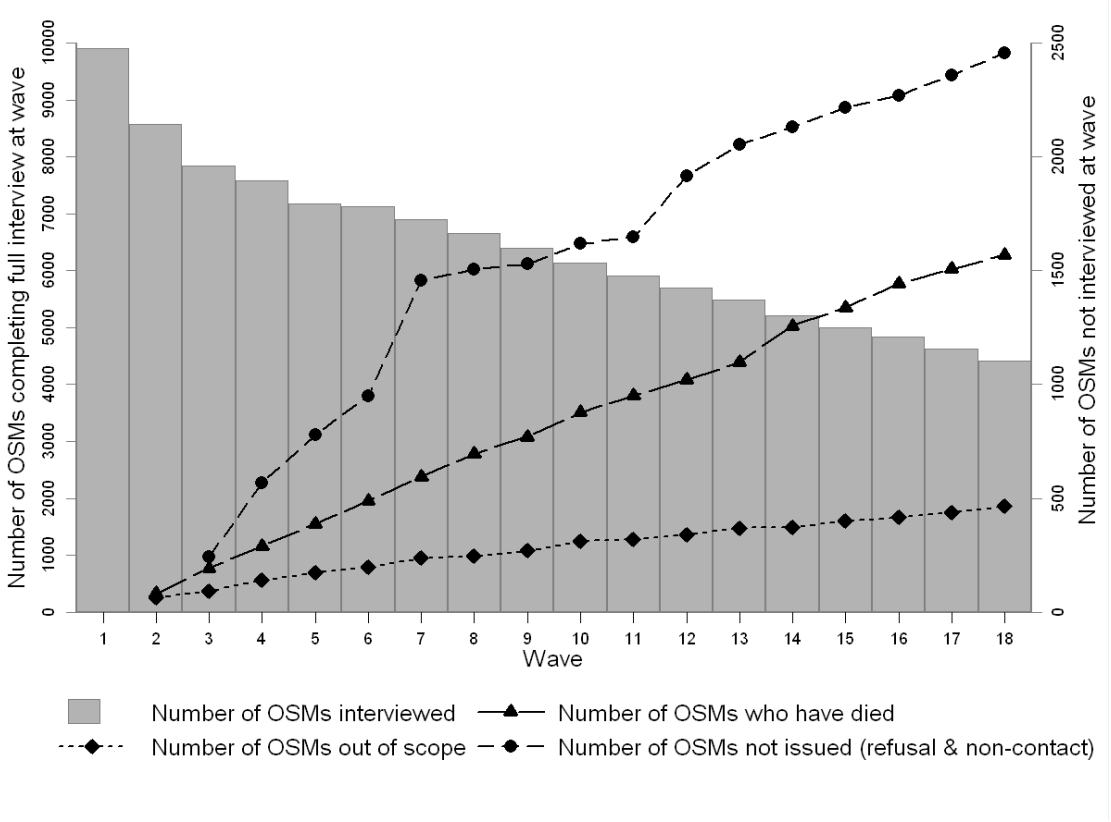
A final important attribute of the BHPS is that interviewers attempt to conduct interviews with all adult members of each sampled household (Taylor *et al*., 2010). This is because the survey follows individuals rather than households as they move through time, as households are not longitudinally consistent units (see Figure 3.1). As all adults in a household are interviewed, it is possible to conduct analyses within household units, for instance to see whether partners have different domestic burdens or whether children and their parents share political and religious views. This is extremely important for this project, as it has long been recognised that there is a lack of research into the intra-household dynamics of mobility decision-making (Sell and De Jong, 1978).

Yet it is important to note that there are also several challenges to using the BHPS for the analysis of mobility decision-making and behaviour. In common with almost all panel surveys, perhaps the biggest drawback of the BHPS is the attrition of survey participants over time. According to Taris (2000), attrition occurs when participants who were interviewed at the initial survey sweep do not provide data in later waves of the study. Attrition most commonly occurs because contact is lost with participants when they die or move away, although participant refusal can also be an important cause of attrition. The fieldwork procedures for the collection of BHPS data were designed to minimise the extent of participant attrition. Both the research centre administering the survey and the individual interviewers work hard to convince people to take part in the study, making several attempts to 'convert' individuals and households who initially refuse to be interviewed. The attrition of movers is also minimised through a thorough procedure for tracing participants (see Taylor *et al.* (2010) for full details). These intensive attempts to reduce attrition are far more extensive than would be practicable when collecting primary data.

Despite these measures, there is still some attrition of BHPS participants over time. The scale and reasons for this attrition can be seen in Figure 3.2, which plots the subsequent interview outcomes for all 9,912 OSMs who

completed a full interview in 1991. The vertical bars (values on the left-hand y axis) show that the number of OSMs who have completed full interviews has dropped steadily over time, although the rate of decline has slowed as the survey has progressed (see Taylor *et al.*, 2010 for further discussion).

Figure 3.2 BHPS response rates and the reasons for the attrition of the 9,912 OSMs who completed a full interview in 1991



Source: Author calculations, derived from figures provided by Taylor *et al.* (2010: 180-181)

Three causes of this decline are shown in the three line plots, which plot the number of OSMs who completed an interview in 1991 who had dropped out of the survey at each subsequent wave for each of the three reasons (values on the right-hand y axis). The line graphs show that there has been a slow but steady increase over time in the number of OSMs who could not be interviewed because they had either died or moved out of scope (often through overseas moves). These types of attrition are not especially problematic, as these individuals have usually also exited the population of interest. In addition, the

number of OSMs who were not contacted because they could not be traced or because their household had previously refused to take part in the BHPS has also increased steadily throughout the study period. This form of attrition is perhaps a more important consideration than attrition through death or overseas moves.

The main methodological problems induced by this attrition of participants occur if attrition is found to be selective on some characteristic which is of relevance for the study (Taris, 2000). If attrition occurs randomly, it poses no statistical issues beyond the reduction in precision which comes with a reduced sample size (Singer and Willett, 2003: 156-159). Selective attrition occurs when certain types of people are more likely to drop out of the panel than others. If attrition is selective, as the survey develops over time the panel becomes increasingly composed of individuals with characteristics which correlate negatively with the propensity to drop out of the survey. Thus, if younger people are more likely to drop out of a panel survey, over time the panel becomes increasingly composed of older individuals. This can bias the results of analyses, leading to inaccurate conclusions if generalised to the population level (Taris, 2000). Uhrig (2008) has analysed the causes of attrition in the BHPS, concluding that there is some evidence that several factors correlate with participant dropout. Many of these factors, such as disinterest in the survey, are known to correlate with attrition in most panel surveys (Taris, 2000). While controlling for these factors in regression analyses can reduce the effects of this selective attrition, it always remains important to interpret the results in light of the possibility of selective attrition.

In the BHPS, Buck (2000a) has shown that attrition correlates with moving status, as people who relocate are more likely to drop out of the survey than people who do not move. This could be problematic if this introduces considerable selection bias. There are two reasons to think this may not be the case. Firstly, Rabe and Taylor (2010) have investigated the impacts of the selective attrition of movers on analyses of moving behaviour. They report that there is little evidence for attrition creating selective bias in analyses of residential mobility (Rabe and Taylor, 2010: 538). In addition, Buck (2000a)

notes that the bias induced by the selective attrition of movers is minimised by the detailed participant tracking procedures employed by the BHPS administrators. While it may not always be possible to locate and interview moving individuals, it is often possible to at least ascertain that they have moved. This enables the records of moving individuals who could not be located to still be included in wave-to-wave analyses of moving behaviour up until the year they disappear (Buck, 2000a). While these factors probably effectively minimise the effects of attrition on short-term analyses of mobility decision-making and behaviour, attrition is likely to be a more important issue in studies tracking individuals for longer periods of time (for instance chapters six and seven). As a result, chapters six and seven contain more detailed discussions of the steps taken to dampen the effects of attrition. Nevertheless, in these cases the results must still be interpreted with the possible selectivity of the participants in mind.

Taris (2000) contends that occasional non-response constitutes a further issue in longitudinal research. Occasional non-response occurs when an individual participates in the survey at some waves but not at others, perhaps because they could not be located that year or because they temporarily refused to take part in the study. In addition to occasional non-response, item non-response also poses a challenge for longitudinal researchers. This occurs when people do not answer all the questions they are asked in a given year. As with attrition, the main problems generated by these forms of non-response occur when non-response is selective (Taris, 2000). In the BHPS, these forms of non-response are less common and hence less problematic than participant attrition. To further reduce the problem of selective non-response, the BHPS administrators have also imputed values on key variables using two standard imputation procedures (see Taylor *et al.*, 2010: 205-207). As recommended by Taylor *et al.* (2010), this thesis uses these imputed values in the analyses in order to reduce any selective biases induced by non-response. Imputed values are particularly common in the household income variables used throughout the empirical studies contained in this thesis.

A further complication when using the BHPS for longitudinal analysis is that the composition of the interviews has changed over time. As a result, not all variables required for the analyses were available across all eighteen waves of data. For instance, an important variable (lfsat3) which records how satisfied respondents' are with their dwelling conditions was not available until wave 6 (1996). This data was also not collected during the wave 11 survey sweep (2001). Furthermore, information on each respondent's expectations of moving was not gathered until wave 8 (1998). Although a minor problem, these restrictions mean that not all waves of data could be used in all the empirical studies. This is particularly true of the analyses contained in chapters four and five, which both required data on moving expectations.

Importantly, there are some limitations regarding what it is possible to know from the BHPS data on moving desires and actual moving behaviour. Rather frustratingly, the question on moving desires captures only binary yes/no responses (although approximately 1% of sampled individuals at each wave responded that they 'did not know' whether or not they desired to move). As a result, little can be said about *how strongly* a person desires to move. This means that treating people who desire to move as a discrete group may lead to individuals with a vague inclination to move being conflated with people who are desperate to leave their current dwelling and neighbourhood. While this problem can to an extent be ameliorated by controlling for dissatisfaction and whether or not a person also expects to move, it is important to be aware that people who desire to move are likely to be a heterogeneous group with both strongly and weakly held moving desires.

In addition, the BHPS sample size means that there are very few observations from people with infrequently expressed moving desires or rare moving behaviours (for instance very long distance moves). As a result of the difficulty of adequately investigating these issues, this thesis does not specifically focus upon the reasons for desiring to move or the distances over which people do move. Although this is a drawback which will be discussed in more detail in chapter eight, there is no alternative source of British longitudinal data with a sufficient sample size to permit this level of disaggregation. It is

therefore important to reiterate that while this thesis constitutes a considerable improvement over cross-sectional analysis of movers and stayers, the analytical framework cannot completely overcome the problems of within-group heterogeneity.

While the frequency of BHPS survey sweeps constitutes a distinct strength over other sources of longitudinal data, the time gap between each observation still constrains how precisely it is possible to link mobility decision-making and behaviour. As moving desires are only recorded at annual intervals, little is known about how peoples' moving desires fluctuate over short periods of time. As a result, linking moving desires at year *t-1* to actual moving behaviour a year later necessarily miscodes individuals who change their expressed relocation preferences during the intervening period. The time gap separating each survey sweep also constrains how much can be known about each person's actual moving behaviour. As a person's moving status is identified by comparing their location at *t-1* with their location at *t*, it is impossible to tell whether a person known to have relocated at *t* has actually made multiple moves since *t-1*. Similarly, it is possible that people who start and end a BHPS year at the same address may have actually relocated and then moved back to their original address between survey sweeps. These issues indicate that it is important to be somewhat cautious when linking moving desires to subsequent moving behaviour, as unobserved changes in desires or unknown actual moving events may complicate otherwise simple relationships. This is likely to be a particularly relevant consideration for highly mobile groups, such as young adults and private renters.

Although it is important to note that the BHPS is an imperfect source of longitudinal data, the aforementioned complications are far outweighed by the unique benefits the BHPS brings to this project. No other British dataset contains such a wealth of information on so many individuals' moving desires and actual moving behaviour as they move through the life course. In addition, the BHPS contains an extraordinarily rich volume of contextual information on processes and events occurring elsewhere in the life courses of all members of sampled households. As a result of these unique advantages, each of the

following chapters is based around the analysis of BHPS data. As each chapter addresses a separate research question using a different set of analytical techniques, each of the chapters contains its own short summary of the coding and sample selection issues pertinent to that particular piece of empirical work.

Chapter 4

A longitudinal analysis of moving desires, expectations and actual moving behaviour

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Abstract

Residential mobility theory proposes that moves are often preceded by the expression of moving desires and expectations. Much research has investigated how individuals form these pre-move thoughts, with a largely separate literature examining actual mobility. Although a growing number of studies link pre-move thoughts to subsequent moving behaviour, these often do not explicitly distinguish between different types and combinations of pre-move thoughts. Using 1998-2006 British Household Panel Survey (BHPS) data, this study investigates whether moving desires and expectations are empirically distinct pre-move thoughts. Using multinomial regression models this study demonstrates that moving desires and expectations have different meanings, and are often held in combination: the factors associated with expecting to move differ depending upon whether the move is also desired (and vice versa). Next, using panel logistic regression models, the paper shows that different desire-expectation combinations have different effects on the probability of subsequent moving behaviour. The study identified two important groups generally overlooked in the literature: those who expect undesired moves and those who desire to move without expecting this to happen.

4.1 Introduction

Moving home enables people to adjust their residential location to meet their changing needs and preferences (Clark and Huang, 2004). In the year preceding the 2001 UK census, approximately 10.3% of Britons changed their place of residence, with the bulk of these individuals moving only over short distances (Bailey and Livingston, 2007). Given the importance of mobility for households and the economy, it is unsurprising that there is a long and rich research tradition exploring how individuals form and act upon decisions to move home. Following Rossi's seminal contribution (Rossi, 1955), studies have generally conceptualised moving as a lengthy and multistep process (Kan, 1999; Kley and Mulder, 2010). Typically, individuals are thought to move following a series of preference formation and move decision-making steps (see Brown and Moore, 1970; Kley and Mulder, 2010; Rossi, 1955; Speare *et al.*, 1975 for examples), although this process need not be linear and sequential (Sell and De Jong, 1983). Following such models, researchers have focused their attention on what leads people to desire a move (Buck, 2000a; Landale and Guest, 1985; Speare *et al.*, 1975), to intend to move (McHugh, 1984), to plan to move (Kley, 2011; van Arsdol *et al*., 1968) or to expect to move (Bach and Smith, 1977; Kan, 1999). A largely separate literature has explored actual moves in detail (see Clark and Dieleman, 1996).

There are two major gaps in the literature exploring residential mobility as a process. Firstly, there are conceptual and methodological inconsistencies in the ways researchers have analysed the pre-move preference formation and decision-making stages. While many studies take care to explicitly define the type of pre-move thought under investigation, some lack conceptual and empirical clarity about the specific concepts being used. For example, Rossi (1955) treats moving intentions and expectations as equivalents, while Kleinhans (2009) considers moving desires and expectations as examples of a more general 'propensity to move' (see also Morris *et al.*, 1976). This lack of clarity is mainly due to a reliance on secondary survey data, which often includes only one question on pre-move thoughts, focusing on either moving

desires, intentions, plans, or expectations. A further consequence of this reliance on secondary surveys is that few studies have examined the differences between various pre-move thoughts, or considered that multiple pre-move thoughts can exist in combination (see Kley, 2011; Kley and Mulder, 2010; Sell and De Jong, 1983 for exceptions). This lack of conceptual and methodological clarity hinders the empirical testing of mobility models, as different pre-move thoughts are likely to be distinct concepts produced by specific sets of factors (see Kley, 2011). In addition, different combinations of pre-move thoughts are likely to reflect different levels of commitment to mobility.

A second gap in the literature concerns the empirical testing of theoretical mobility models. Many papers have focused solely on individuals' stated housing preferences or pre-move thoughts, without exploring their actual moving behaviour (see Molin *et al.*, 1996; Sirgy *et al.*, 2005). Recent longitudinal research is helping to address this deficiency, by investigating the mobility behaviour of individuals who had, or had not expressed pre-move thoughts (Buck, 2000a; Clark and Davies Withers, 2007; De Groot *et al.*, 2011; Ferreira and Taylor, 2009; Kan, 1999; Kley and Mulder, 2010; Lu, 1998; Lu, 1999a). However, such studies typically only link the expression of one pre-move thought to actual moving behaviour, potentially obscuring variation between individuals in the likelihood of their thoughts being realised. This is because many panel surveys only ask respondents one question about whether they are thinking of moving.

The above observations lead to the formation of three working hypotheses. Firstly, we hypothesise that moving desires and expectations are different and distinct pre-move thoughts, influenced by different predictor variables. It is anticipated that moving desires are more strongly influenced by subjective evaluations of dwelling and neighbourhood quality than moving expectations, as moving expectations may also be the outcome of sudden life events rather than gradual increases in dissatisfaction. In addition, expressing a desire to move may be less constrained by household and macro-contextual circumstances (see Lu, 1998; Sell and De Jong, 1983).

Secondly, it is hypothesised that moving desires and expectations can be held in distinct combinations. The characteristics of those desiring but not expecting to move are likely to differ from those who both desire and expect to move, with limited access to resources inhibiting some individuals from expecting to be able to act upon their moving desires. Uncovering this heterogeneity will enable us to develop our understanding of the different decision-making pathways people follow when deliberating a move. Analysing desires and expectations in combination will also shed light on the factors inhibiting individuals from acting upon their moving desires, as well as developing our understanding of why people expect undesired moves.

Thirdly, we anticipate that the *combination* of moving desires and expectations expressed affects the likelihood of subsequently moving. It is hypothesised that the likelihood of realising a moving desire is increased if a move is also expected. In this light it is important to distinguish between desires and expectations that lead to a move, and moving desires which do not lead to a move due to a lack of expected opportunities to realise this desire. We anticipate that individuals with lower incomes are less likely to expect to be able to act upon their moving desires, potentially 'trapping' them in less desirable dwellings and neighbourhoods if they are subsequently unable to actually move. We argue that revealed preference techniques may therefore be insufficient to fully understand housing preferences, as certain individuals may be constrained from realising their underlying desires through mobility (see Molin *et al.*, 1996).

This paper contributes to the mobility literature in three empirically innovative ways. First, it explores whether moving desires and expectations are empirically distinct concepts. Second, it analyses who is most likely to express different moving desire-expectation combinations. Finally, the paper investigates the links between moving desire-expectation combinations and subsequent mobility behaviour. No previous study has investigated these issues in combination, and the outcomes will contribute to a refinement of theories of mobility. The study uses 8 waves of British Household Panel Survey (BHPS) data and panel regression models.

4.2 Literature review

Much of our conceptual understanding of how individuals make moving decisions has focused upon mobility as an adjustment response to rising housing stress, which creates disequilibrium between the current and a desired housing situation. Stress-threshold models propose that people move in response to this disequilibirum, changing residence in order to improve the utility they derive from their housing consumption and hence reduce their housing stress (Brown and Moore, 1970; De Jong and Fawcett, 1981; Wolpert, 1965). Speare *et al.* (1975; Speare, 1974) introduced the concept of residential satisfaction as a mediating construct between the factors altering place utility calculations and the formation of a moving desire. In Speare's model, individuals initiate the moving process when dissatisfaction with their current dwelling passes an internally defined threshold. This dissatisfaction can arise due to life events, such as household expansion and a shortage of dwelling space or the possibility of accepting a better job elsewhere (see Speare *et al.*, 1975). As mobility is a response to housing stress, moving should therefore enable individuals to improve their housing and neighbourhood satisfaction (Lu, 1999b).

A central feature of such models is that moving is a process and not a discrete event. Moves made as a response to housing stress are typically thought to be preceded by some form of preference formation, deliberation and destination choice processes, often conceptualised as comprising a series of 'steps' (eg. Brown and Moore, 1970; Kley, 2011; Rossi, 1955; Speare *et al.*, 1975). Different pre-move thoughts are expressed at each of these stages (Kley, 2011). The initial reaction to rising housing stress and dissatisfaction is typically the expression of a desire to move (Rossi, 1955). Expressing this initial moving desire indicates that an individual perceives that moving would improve their well-being. Although cognitive dissonance reduction behaviour may inhibit an individual from expressing a desire to move when moving is deemed impossible, in general, expressing a moving desire involves far less consideration of feasibility than expressing moving intentions, plans or

expectations (Lu, 1998). Micro level restrictions (such as having a low income) and macro contextual constraints (such as living in a tight local housing market) should therefore have relatively weak effects on moving desires, but progressively stronger effects on moving intentions, expectations and actual moving behaviour (van Ham and Feijten, 2008).

Much prior research confirms that dissatisfaction with dwelling or neighbourhood conditions is a key motivation for individuals to desire to move (Deane, 1990; Landale and Guest, 1985; Speare *et al.*, 1975). This dissatisfaction may be a consequence of rising housing stress, or alternatively may arise as a consequence of social mobility aspirations (Speare, 1974). Individuals living in housing which does not meet socially constructed norms may feel dissatisfied with their housing situation, stimulating a desire to move to a dwelling and neighbourhood which meet these cultural standards (Morris *et al*., 1976; Morris and Winter, 1975). Although housing norms vary with stage in the life course and social group, generally in Western societies such norms prioritise single family (detached) properties, homeownership and surplus dwelling space.

Over time, moving desires can strengthen and stimulate the expression of moving intentions and finally expectations (Rossi, 1955; Sell and De Jong, 1983). Individuals expecting to move have assessed the move as more likely than not to occur in the specified period. Expectations of moving should therefore closely predict actual moves, although previous work suggests that the link is weaker than might be anticipated (Kan, 1999). Moving from solely desiring to desiring *and* expecting to move requires the individual to judge that moving is possible, indicating a high level of commitment to mobility (see De Groot *et al.*, 2011; Sell and De Jong, 1983). This is compatible with the theory of planned behaviour (Ajzen, 1991; De Jong, 2000; Kley, 2011). While all individuals who desire to move anticipate that moving will enable them to attain valued goals, whether an expectation is also expressed may depend upon whether the individual also perceives they are in control of the mobility process. Those desiring but not expecting to move thus may perceive that they lack control, as micro level restrictions (such as low incomes or caring

responsibilities) or macro level constraints (such as a lack of appropriate housing vacancies) are judged to be insurmountable.

The model of the moving decision process outlined so far focuses on moving as a volitional response to housing stress, triggered primarily by dissatisfaction. Not all decision-making may however follow this linear progression. While housing stress may increase gradually over time, events in the life careers of household members can rapidly increase housing stress levels or directly trigger undesired moves (Clark and Davies Withers, 1999; Clark and Ledwith, 2006; Mulder and Hooimeijer, 1999). Events in the labour force career such as getting a job, becoming unemployed or retiring, as well as household events such as union formation, dissolution and childbirth have been shown to strongly affect moving behaviour (Böheim and Taylor, 2002; Clark and Davies Withers, 1999; Feijten and van Ham, 2010; Flowerdew and Al-Hamad, 2004). Unless anticipated, such moves are unlikely to occur following a lengthy and sequential decision-making process, but instead may have been preceded by the sudden expression of an expectation of moving, even if this was not desired. Expressing an undesired expectation of moving may indicate that a person anticipates having to move to respond to changing circumstances, such as unemployment or union dissolution, rather than to pursue valued goals.

To better understand this non-linearity of the decision-making process, considering the *combination* of pre-move thoughts expressed may be valuable. While many individuals may desire to move, only those who perceive that they are also able to overcome the restrictions and constraints impeding a possible adjustment move are likely to simultaneously expect to relocate. Equally, while desiring and expecting to move may be the outcome of a lengthy period of decision-making motivated by dissatisfaction, expressing a moving expectation but no moving desire may indicate that life events are disrupting the individual's preferred housing career. Dissatisfaction with dwelling or neighbourhood conditions is therefore likely to be strongly associated with moving expectations only when these are expressed in conjunction with a moving desire. Investigating whether individuals express pre-move thoughts in combination

could therefore help to reconcile the stress and event triggers of moving into one conceptual model.

While a growing number of longitudinal studies link pre-move thoughts to subsequent moving behaviour (eg. Buck, 2000a; De Groot *et al.*, 2011; Duncan and Newman, 1976; Ferreira and Taylor, 2009; Kan, 1999; Lu, 1998; Lu, 1999a), few have investigated whether the non-linearity of the mobility process means that the combination of pre-move thoughts expressed alters subsequent behaviour (see Kley, 2011; Kley and Mulder, 2010 for exceptions). This is often due to data constraints, as panel surveys typically gather information about only one type of pre-move thought. Prior research by Sell and De Jong (1983) demonstrates the value of considering desires and expectations in combinations, as only approximately 56% of movers in their study exactly followed the sequential decision-making process. We might therefore anticipate the likelihood of a desire to move being realised to partially depend upon whether or not the move is also expected. Those desiring but not expecting a move may be unlikely to move, perhaps as the lack of resources inhibiting them from perceiving that moving will be possible also prevents them actually moving. Those desiring and expecting a move may be much more likely to actually move, as they assess that they can overcome any restrictions or constraints. Those expecting undesired moves are likely to fall between these extremes, as such individuals may strive to avoid having to move.

Analysing moving desires and expectations in combinations also enables us to develop our understanding of the consequences of mobility for individual well-being. The consequences of making an expected move are likely to be influenced by whether or not the move was also desired. While some people may make expected but undesired moves as they accept these are necessary to access other valued opportunities (such as career progression), for others, undesired expected moves could have negative effects on their quality of life. In contrast, making a desired and expected move is likely to have a positive impact upon individual well-being.

4.3 Data and methods

4.3.1 Dataset and selection

This study made use of the British Household Panel Survey (BHPS). The BHPS is a panel survey comprising a sample of 10,300 individuals (from 5,500 households), selected from across the UK in 1991 and re-interviewed each subsequent year (Berthoud, 2000; Taylor *et al.*, 2010). The sample is representative of the UK population and was boosted in 1999 and 2001 with additional households from Scotland, Wales and Northern Ireland. Each year, respondents were asked to answer wide-ranging questions across a host of topics. A crucial advantage of the BHPS is its low attrition rate, although moving individuals are known to be more likely to drop out than non-movers (as with most panel surveys). Buck (2000a) showed that the BHPS is ideal for studying mobility behaviour, as we typically know whether individuals have moved even if they were not re-interviewed.

This study made use of a panel of 8 waves of BHPS data covering the period 1998-2006, with wave 11 (2001) excluded. Analysis was restricted to these waves as information on key variables was not collected during other survey sweeps. Pre-1998 waves of the survey were excluded because information on moving expectations was not gathered in these years. The dataset was transformed into person-year format prior to analysis. Person-years in which the respondent was a dependent child or lived in an institution were removed, as these individuals do not have independent housing careers. Cases missing values on key dependent or control variables (such as moving desires, expectations or housing tenure) were also removed, as were observations where the respondent's moving status between waves *t* and *t+1* was unknown.

One member of each household was then randomly selected for analysis, as there is likely to be correlation in pre-move thoughts and moving behaviour between household members. Exceptions were made for person-years in which the respondent lived with multiple unrelated adults, with all such person-years included (as these individuals are likely to have largely

independent housing careers). Only respondents defined as 'decision-makers' were eligible for selection, as the views of these individuals are likely to be the most important determinants of actual household mobility. Household decision-makers were identified as the owners or renters of the dwelling and their partners, with household heads and their partners coded as decision-makers if ownership or rental information was missing. After a decision-maker was randomly selected at the household's wave of entry, this respondent was followed for as long as they remained a decision-maker. In the event of a household losing its selected individual (due to attrition, non-response or household composition changes), a new decision-maker was randomly selected and tracked. Following these procedures, the final sample contained 63,083 person-years provided by 14,506 respondents.

4.3.2 Methods

The first set of analyses explored the existence of moving desire-expectation combinations using a multinomial logistic regression model, with standard errors adjusted for the clustering of observations within respondents (Wooldridge, 2002). This necessitated the creation of a four-way categorical dependent variable indicating the combination of dichotomous moving desires and expectations the respondent expressed at each wave. Moving desires were measured by the answer to the following survey question: '*If you could choose, would you stay here in your present home or would you prefer to move somewhere else?*'. Moving expectations were measured by the response given to the question: '*Do you expect you will move in the coming year?*'. Those person-years in which the respondent answered that they 'did not know' whether they desired or expected a move were classified as having no moving desire or moving expectation respectively. This is because not desiring or expecting to move can be thought of as the default response, with those respondents not clearly expressing a moving preference or expectation most likely to have not given moving much thought. Further analyses (not shown

Table 4.1 Variable summary statistics (total N=63,083)

Categorical variables	N	%
Moving desire-expectation combinations (ref=no desire or expectation)		
desire but no expectation	13450	21.32
no desire but expectation	2181	3.46
desire and expectation	4883	7.74
Mover (ref=no move)	6669	10.57
Dissatisfied with dwelling (ref=satisfied)	14212	22.53
Dislike neighbourhood (ref=like neighbourhood)	4410	6.99
Female (ref=male)	37274	59.09
Ethnic minority (ref=white)	1495	2.37
Lagged partner status change *t-1* to *t* (ref=remained couple) [1]		
remained single	20498	32.49
formed partnership	1353	2.14
partnership dissolution/widowhood	1517	2.40
unknown-single	2232	3.54
unknown-couple	2609	4.14
Lagged change in presence of children *t-1* to *t* (ref=remained without children) [1]		
children-same number	15030	23.83
increase in number of children	1919	3.04
decrease in number of children	2617	4.15
unknown-no children	3540	5.61
unknown-children	1292	2.05
Education level (ref=no formal education)		
low (basic secondary school level)	14879	23.59
medium (higher school/vocational equivalent)	22859	36.24
high (degree+)	8481	13.44
unknown	1226	1.94
Lagged employment status change *t-1* to *t* (ref=remained employed) [1]		
remained unemployed	539	0.85
remained outside labour force	21297	33.76
entered employment	1778	2.82
entered unemployment	894	1.42
exited labour force	2086	3.31
unknown-employed	2741	4.35
unknown-unemployed	263	0.42
unknown-outside labour force	2088	3.31
Housing tenure (ref=homeowner)		
social renter	12381	19.63
private renter	6651	10.54
Years in dwelling (ref=0-1)		
2-5	10678	16.93
6-20	12555	19.90
21-40	5605	8.89
>40	1537	2.44
unknown	22537	35.73
Continuous variables	**Mean**	**Std deviation**
Age	49.17	17.50
Age^2	2723.81	1839.01
Real household income (£10,000)	2.73	2.32
Roomstress (n people/n rooms)	0.59	0.31

Source: BHPS, own calculations. [1] Lead values of these variables (measuring changes *t* to *t+1*) are used in Table 4.6. The frequencies of the lead variables are very similar to these lagged values.

here) reveal that removing these person-years has little effect on the modelling results.

From the literature review, it was anticipated that subjective evaluations of housing and neighbourhood quality were likely to have important links to pre-move thoughts and moving behaviour. A dichotomous variable indicating whether an individual liked their neighbourhood was constructed from the answer given to the following survey question: *'Overall, do you like living in this neighbourhood?'.* A variable indicating whether the individual was satisfied with their dwelling was constructed from the answer to the survey question: '*How dissatisfied or satisfied are you with your house/flat?'*. To ensure comparability, although respondents replied to this question using a 7-point Likert scale, responses were dichotomised (with neutral responses coded as dissatisfied as satisfaction is anticipated to be the default response). Various independent variables identified by previous research as being strongly linked to moving behaviours were also included in the model (see Table 4.1). The main hypothesised effects of these variables on moving desire-expectation combinations are presented in Table 4.2.

The second set of analyses modelled the likelihood of an actual move over any distance occurring between waves *t* and *t+1*, with the respondent's wave *t* moving desire-expectation combination included as an independent variable. A host of lagged control variables were also included (see Table 4.1 for details and Table 4.2 for hypothesised effects). The status transition variables included in these models capture whether an event (such as a union formation) occurred between the expression of the desire-expectation and the move response (rather than before the desire-expectation as in the multinomial model). A one year interval between the expression of the moving desire-expectation combination and the observation of actual moving behaviour was chosen for two reasons. Firstly, the moving expectation survey question explicitly elicited the respondent's expectation of moving within a one year period. Secondly, linking moving desire-expectation combinations to actual moves over greater time gaps would necessitate ignoring the respondent's preferences and expectations at the intervening waves. To model mobility,

panel logistic regression models were used (Hsiao, 2003). These models take into account that person-years are nested within individuals and that there may be unobserved individual-specific variability in moving behaviour.

Table 4.2 Hypothesised variable effects on moving desire-expectation combinations and actual moves

Variables	Moving desire-expectation combination			Actual mobility
	Desire, no expectation	Expectation, no desire	Desire and expectation	
Dissatisfaction	+	0	+	+
Age	-	-	-	-
Ethnic minority	+	+	-	0
Union formation	+	0	+	+
Union dissolution/widowhood	0	+	+	+
Increased number of children	+	0	+	+
Unemployed	+	+	0	+
Education	-	0	+	+
Income	-	-	+	+
Social renter	+	0	0	0
Private renter	-	+	+	+
Roomstress	+	0	+	+
Duration of stay	-	-	-	-
Desire no expectation				+
Expectation no desire				++
Desire and expectation				+++

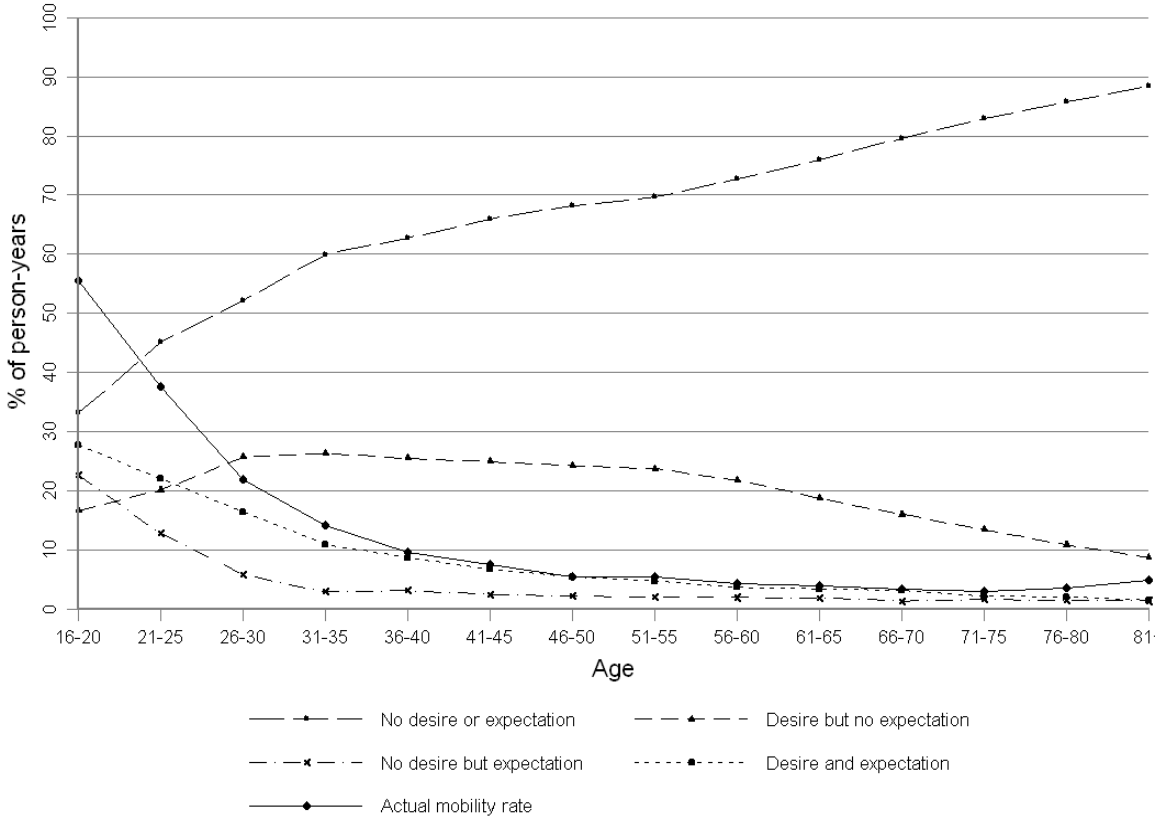
+ positive effect hypothesised *- negative effect hypothesised* *0 no effect hypothesised*

4.4 Analysis

Given the well known associations between age and mobility propensity (Clark and Dieleman, 1996), it is surprising that the expression of moving desires and expectations across the life course has not been documented. Figure 4.1 provides a graph plotting the percentage of cases in each age category where the respondent expressed one of the moving desire-expectation combinations or made an actual move. The familiar pattern of declining actual mobility with age is evident, with mobility rates highest amongst young adults, before dropping rapidly and levelling off in the early 40s. Rates of desiring and

expecting a move also drop with age (albeit less sharply), closely tracking the actual mobility rate throughout middle and old age. Unsurprisingly, the proportion of cases where no desire or expectation to move was expressed increases steadily with age. Expressing an expectation of making an undesired move is largely a feature of young adulthood, presumably due to the dynamic life careers and often unstable housing situations of young people. Interestingly, the proportion of cases where the respondent desired but did not expect to move is particularly high for middle-aged individuals (between 30 and 60). For these age groups, the large difference between the proportion of people desiring but not expecting to move and the much lower proportion of people who actually move suggests that many people may be unable to act upon their moving desires.

Figure 4.1 Moving desire-expectation combinations and actual moves by age



4.4.1 Expressing moving desires and expectations

In order to begin to test the first two hypotheses, Table 4.3 presents the bivariate relationships between housing satisfaction, (dis)liking the neighbourhood and moving desire-expectation combinations. The column totals suggest that moving desires and expectations are distinct concepts, as individuals desire a move in far more person-years than they expect a move. Considering combinations of desires and expectations also appears important. Desiring but not expecting a move (21.32% of person-years) is much more common than desiring and expecting a move (7.74% of person-years), while expecting an undesired move (3.46% of person-years) is the least common combination. The results show that in cases where the respondent reported satisfaction with their dwelling or liking their neighbourhood, respondents also typically reported no desire or expectation of moving. Dissatisfaction with the dwelling or particularly disliking the neighbourhood is closely associated with moving desires, but much more weakly associated with expecting an undesired move. This shows that subjective evaluations of dwelling and neighbourhood quality have conditional effects on moving expectations. Individuals who are unhappy with their current housing situation appear likely to expect a move only if one is also desired.

It is striking that 62% of those who dislike their neighbourhood desire but do not expect to move, while only 39% of those who are dissatisfied with their dwelling report this combination. This disparity is possibly partially due to the difference in the phrasing of the survey questions, with ‘disliking’ representing a much stronger negative sentiment than ‘dissatisfaction’. However it is also possible that people living in the least desirable areas lack the opportunity to move and hence consistently report disliking their neighbourhood and desiring a move. While households can ameliorate dwelling dissatisfaction through *in situ* improvement (perhaps through constructing an extension or paying for repairs, renovation or redecoration), the neighbourhood context is largely outside the control of individuals and hence can only be improved through mobility.

Table 4.3 Bivariate analysis linking subjective evaluations of dwelling and neighbourhood to moving desire-expectation combinations

	Respondent's desire-expectation combination at wave *t*				
	No desire or expectation	**Desire, no expectation**	**No desire, expectation**	**Desire & expectation**	**Total (100% & N)**
Housing satisfaction (%)					
Satisfied	76.12	16.20	3.33	4.35	48871
Dissatisfied	37.77	38.94	3.90	19.39	14212
Liking the neighbourhood (%)					
Likes	72.04	18.27	3.68	6.00	58673
Dislikes	6.83	61.86	0.43	30.88	4410
Total (% & N)	42569 67.48	13450 21.32	2181 3.46	4883 7.74	63083 100.00

Source: BHPS, own calculations

Table 4.4 presents the results of a multinomial regression model analysing the factors associated with expressing different moving desire-expectation combinations. The reference category is having no desire or expectation of moving. Hausman and Small-Hsiao tests of the Independence of Irrelevant Alternatives assumption indicate that this assumption is not violated (results not shown). The pseudo r^2 value indicates that the model explains a significant proportion of the variance in expressed moving desire-expectation combinations. Nevertheless, it is clear that unobserved individual factors such as anticipated life events, personal relationships with family and friends or perceived career opportunities also have a strong influence on the expression of pre-move thoughts. Overall, the modelling results lend support to the idea that moving desires and expectations are different pre-move thoughts held in distinct combinations. Housing dissatisfaction or disliking the neighbourhood are strongly associated with desiring or desiring and expecting a move. These variables have much weaker (and less significant) effects on expecting an undesired move, indicating that expecting an undesired move is rarely a result of perceived deficiencies with the dwelling or neighbourhood.

Table 4.4 Multinomial logit model of moving desire-expectation combinations (ref=no desire or expectation)

Variable	Desire, no expectation		Expectation, no desire		Desire and expectation	
	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
Dissatisfied with dwelling	1.201***	0.032	0.514***	0.057	1.643***	0.041
Dislike neighbourhood	3.347***	0.073	0.287	0.242	3.843***	0.082
Age	0.015**	0.007	-0.090***	0.009	-0.059***	0.009
Age^2	-0.000***	0.000	0.001***	0.000	0.000**	0.000
Female	-0.070	0.037	-0.200***	0.053	-0.107**	0.046
Ethnic minority	0.216**	0.107	0.088	0.152	-0.065	0.145
Partner status change *t-1* to *t* (ref=remained couple)[1]						
remained single	-0.106**	0.046	0.437***	0.069	0.143**	0.058
formed partnership	0.167**	0.08	0.120	0.132	0.410***	0.094
partnership dissolution/widowhood	0.051	0.078	1.083***	0.121	0.760***	0.097
Change in children *t-1* to *t* (ref=remained without children)[1]						
children-same number	-0.241***	0.046	-0.558***	0.08	-0.476***	0.059
increased number of children	-0.213**	0.072	-0.447**	0.142	-0.216**	0.089
decreased number of children	-0.331***	0.064	-0.175	0.109	-0.352***	0.087
Education level (ref=very low)						
low	0.117**	0.054	-0.130	0.093	0.219**	0.078
medium	0.200***	0.053	0.086	0.089	0.433***	0.075
high	0.154**	0.069	0.429***	0.101	0.721***	0.088
unknown	0.132	0.131	-0.285	0.209	0.337**	0.165
Employment status change *t-1* to *t* (ref=remained employed)[1]						
remained unemployed	-0.208	0.146	0.027	0.256	-0.011	0.196
remained out of labour force	-0.342***	0.050	0.268***	0.078	-0.145**	0.067
entered employment	-0.053	0.068	0.135	0.120	0.051	0.089
entered unemployment	-0.131	0.098	0.585***	0.163	0.250**	0.123
exited labour force	-0.223***	0.067	0.161	0.135	0.225**	0.093
Real household income (£10,000)	-0.073***	0.010	0.001	0.011	0.005	0.008
Housing tenure (ref=homeowner)						
social renter	0.109**	0.049	-0.132	0.087	-0.155**	0.065
private renter	0.130**	0.062	1.260***	0.069	1.024***	0.063
Roomstress	0.419***	0.065	0.387***	0.095	0.489***	0.077
Years in dwelling						
2-5	0.537***	0.044	-0.055	0.076	0.248***	0.059

6-20	0.731***	0.056	0.000	0.095	0.272***	0.077
21-40	0.809***	0.078	-0.146	0.143	-0.196	0.136
>40	0.683***	0.155	-0.721**	0.314	-0.054	0.264
unknown	0.460***	0.050	-0.133	0.074	0.000	0.066
Constant	-1.910***	0.178	-0.814**	0.248	-1.575***	0.221
Model log pseudolikelihood=46531.09(improvement over null=10831.396)			Wald chi^2(d.f.)=9961.82(111)		Pseudo r^2=0.189	
Standard errors adjusted for 14506 clusters within personal identification number			N=63083			

***=p<0.001 **=p<0.05

[1] These variables also contain dummies for transitions where the individual's status at *t-1* was unknown (results not shown here)

Source: BHPS, own calculations

As people get older, they are more likely to express a desire without expecting a move, and less likely to expect any sort of move. This pattern reflects the findings from Figure 4.1. Women are less likely than men to express any of the moving desire-expectation combinations compared to not desiring or expecting. The only significant effect for ethnicity shows that ethnic minorities are more likely than others to desire but not expect to move. This indicates that ethnic minorities perceive themselves as less able to realise their housing preferences.

The effects of a change of partner status are different for each moving desire-expectation combination. Those who remained single over the last year are the least likely to desire a move without expecting one, although they are highly likely to expect an undesired move or to expect a desired move. Forming partnerships seems to principally affect moving desires. In contrast, ending a partnership has a large positive impact on the propensity to expect a desired or undesired move, as individuals seek to adjust their housing consumption to meet their changed circumstances following widowhood or union dissolution. These effects suggest that life events have greater impacts on moving expectations than on moving desires. This indicates that moving decisions do not always follow a linear path and that dissatisfaction does not completely mediate between changing household circumstances and the expression of pre-move thoughts.

The effects of various other independent variables also generally support the conjecture that moving desires and expectations are held in distinct combinations. Almost all of the children dummies are negative and significant across the model. This implies that having any number of children reduces all thoughts of moving, perhaps because people have already moved prior to childbirth in anticipation of their changing housing needs. Education level was found to be most strongly linked to desiring and expecting a move, with the highly educated most likely to express this combination. High levels of education are also associated with expecting an undesired move. This may be because career progression in highly skilled occupations often requires spatial flexibility (van Ham *et al.*, 2001). Unexpectedly, we find that

those with higher levels of education are also more likely to desire but not expect to move than those with very low levels of education. This may be because higher levels of education increase employment opportunities, access to information and widen the awareness spaces of individuals (Flowerdew and Al-Hamad, 2004). This could make more educated individuals increasingly likely to think about moving and hence express weak moving desires, even when moving is not seriously being considered.

Changes in employment status appear associated with desire-expectation combinations. Individuals who become unemployed are more likely to expect to move, while becoming economically inactive reduces the propensity to desire but not expect to move and increases the propensity to expect to make a desired move. This may be because the loss of workplace ties is perceived to grant people greater freedom to move. Household income has a negative effect only on the combination desiring but not expecting a move, presumably because those with higher incomes have either already selected themselves into more desirable locations or because they anticipate being able to quickly act upon their moving desires. Housing tenure is strongly associated with pre-move thoughts. Social renters appear to be particularly disadvantaged, as they are more likely to desire but not expect a move and less likely to desire and expect a move. In contrast, private renting is most strongly associated with expecting to move. Roomstress is positively associated with expressing all desire-expectation combinations, while longer durations of stay in the current dwelling appear to predominantly have significant positive effects on moving desires.

To summarise, the results in Table 4.4 show that those who are unhappy with their home or neighbourhood, with lower incomes and living with high levels of roomstress are highly likely to desire but not expect a move. Individuals with dynamic life courses, such as the young and highly educated, private renters and those experiencing union dissolution or widowhood events are much more likely to expect an undesired move. Unsurprisingly, these individuals are also likely to desire and expect a move. However, housing stress also appears to be a much stronger factor here, as being unhappy with dwelling

or neighbourhood conditions is very strongly associated with desiring and expecting to move.

4.4.2 Moving desire-expectation combinations and subsequent mobility

Next we explore how different moving desire-expectation combinations affect subsequent moving behaviour. Considering combinations may be important, as linking only one pre-move thought to actual moving behaviour may ignore substantial differences between individuals in the likelihood of this thought being realised. Table 4.5 presents bivariate associations between moving desire-expectation combinations and actual moves over the subsequent year. The patterns found persist when the gap between expressed desire-expectation combinations and actual moves is extended from 1 to 2 or 3 year intervals, although the absolute numbers moving in each category increases and sample size drops (results not shown).

Moves occur in 10.57% of cases (see Buck, 2000a for similar findings using the BHPS), although this rate varies greatly depending upon the prior desire-expectation combination expressed. Respondents reporting no desire or expectation of moving are unlikely to subsequently actually move, with those desiring but not expecting a move only slightly more likely to do so. Expectations appear to predict moves much more closely, particularly if accompanied by a desire. This confirms that desires are expressed with much less consideration of feasibility than expectations. Importantly, even where moves are desired and expected an actual move is subsequently only made in 54.86% of cases. This is probably because executing the move was more difficult than anticipated or because the expected move was postponed or abandoned. Considering moving desire-expectation combinations appears to enhance the precision of longitudinal research analysing the likelihood of pre-move thoughts translating into actual moves, as desires are likely to be realised only if accompanied by an expectation.

Table 4.5 Moving desire-expectation combinations and actual moving behaviour over the next year

Respondent's desire-expectation category at wave *t* (%)	Respondent's actual moving behaviour between *t* and *t+1*		Total (100% & N)
	Stayer	Mover	
No desire or expectation	95.62	4.38	42569
Desire but no expectation	92.00	8.00	13450
No desire but expectation	51.90	48.10	2181
Desire and expectation	45.14	54.86	4883
Total (% and N)	89.43 56414	10.57 6669	100.00 63083

Source: BHPS, own calculations.

Table 4.6 presents the results of two panel logistic regression models analysing the likelihood of an actual move occurring in the year following the expression of moving desire-expectation combinations. The fit of the models indicates that moving behaviour is also affected by unobserved factors, such as unknown changes in household circumstances or in individual pre-move thoughts between *t* and *t+1*. Model 1 presents a basic model of actual moves, including a number of control variables known to be strongly associated with mobility. In contrast to the multinomial model in Table 4.4, in these models the status transition variables capture events in the respondents' life careers *between* the expression of the desire-expectation combination and the possible move response. This is because the results in Table 4.4 show that the effects of life events occurring prior to the expression of the desire-expectation combination will be channelled through these pre-move thoughts. In general, the control variables have the anticipated effects: with increasing age, individuals are less likely to move; union formation and dissolution/widowhood events strongly increase mobility; having children decreases mobility (unless the number of children increases); higher levels of education and changes in economic status are associated with moving; higher levels of income facilitate mobility; private renters are more mobile than homeowners; experiencing a deficiency of space

Table 4.6 Panel logit models of the annual likelihood of moving (ref=no move)

Variable	Model 1		Model 2	
	Coeff.	S.E.	Coeff.	S.E.
Age	-0.105***	0.006	-0.091***	0.007
Age^2	0.001***	0.000	0.001***	0.000
Female	-0.146***	0.034	-0.111**	0.037
Ethnic minority	-0.192	0.102	-0.147	0.111
Partner status change *t* to *t+1*[1] (ref=remained couple)				
remained single	0.195***	0.044	0.144**	0.048
formed partnership	1.742***	0.077	1.621***	0.085
partnership dissolution/widowhood	1.764***	0.076	1.905***	0.082
Change in n. children *t* to *t+1*[1] (ref=remained without children)				
children-same number	-0.234***	0.047	-0.116**	0.051
increased number of children	0.312***	0.072	0.310***	0.081
decreased number of children	0.015	0.088	0.167	0.095
Education level (ref=very low)				
low	0.077	0.057	0.022	0.060
medium	0.182***	0.055	0.045	0.058
high	0.420***	0.065	0.153**	0.071
unknown	-0.161	0.126	-0.313**	0.139
Employment status change *t* to *t+1*[1] (ref=remained employed)				
remained unemployed	0.029	0.165	0.057	0.179
remained outside labour force	0.056	0.051	0.074	0.055
entered employment	0.317***	0.080	0.172	0.090
entered unemployment	0.304**	0.112	0.238	0.124
exited labour force	0.347***	0.084	0.249**	0.091
Real household income (£10,000)	0.016**	0.007	0.013	0.008
Housing tenure(ref=homeowner)				
social renter	-0.134**	0.051	-0.103	0.055
private renter	1.236***	0.047	0.905***	0.052
Roomstress	0.246***	0.061	0.097	0.066
Years in dwelling (ref=0-1)				
2-5	-0.178***	0.048	-0.243***	0.052
6-20	-0.346***	0.063	-0.462***	0.066
21-40	-0.751***	0.100	-0.776***	0.104
>40	-0.760***	0.175	-0.782***	0.179
unknown	-0.661***	0.051	-0.735***	0.054
Dissatisfied with dwelling	0.685***	0.036	0.246***	0.041
Dislike neighbourhood	0.730***	0.052	0.021	0.059
Moving desire-expectation (ref=no desire or expectation)				
desire but no expectation			0.543***	0.048
expectation but no desire			2.223***	0.065
desire and expectation			2.905***	0.054
Intercept	-0.214	0.159	-1.003***	0.173
Rho	0.077	0.012	0.085	0.014
Log likelihood(improvement over null)	-15425.062(4856.717)		-13280.462(7001.317)	
Wald chi^2 (d.f.)	6865.983(37)		7221.828(40)	
N	63083		63083	

***=*p*<0.001 **=*p*<0.05

[1] These variables also contain dummies for transitions where the individual's status at *t+1* was unknown (results not shown here)

Source: BHPS, own calculations

increases mobility; longer durations at the same address and housing satisfaction or liking the neighbourhood lead to a lower likelihood of subsequently moving.

Model 2 presents an identical model but with prior moving desire-expectations added, which greatly improves the model fit compared to Model 1. Those desiring a move without an expectation are somewhat more likely to subsequently move than those with no desire or expectation of moving. Expecting to move appears to be much more strongly linked to actual moves, as individuals expecting to move are highly likely to do so, particularly if this expected move is also desired. To accurately model the links between moving desires or expectations and actual moves, it is beneficial to consider the two in combination. This is important, as many studies only include one type of pre-move thought. The control variable parameters change only slightly when desire-expectations are added, although most of the socio-economic variables (except having a high level of education or exiting the labour force) and disliking the neighbourhood become insignificant. This indicates that desires and expectations mediate the direct effects these factors have on mobility. Interestingly, the private rental coefficient remains strongly positive and significant in Model 2. This suggests that there is much unwanted and unexpected mobility in the private rental sector, perhaps due to a lack of security of tenure.

4.5 Conclusions

This paper was motivated by concerns that the mobility literature does not always empirically distinguish various pre-move thoughts and their associations with subsequent moving behaviour. We hypothesised that moving desires and expectations are distinct pre-move thoughts which are influenced differently by predictor variables. This is supported by the results, which demonstrate that dwelling dissatisfaction or disliking the neighbourhood are much more strongly associated with desiring rather than expecting to move. The findings also

support the second hypothesis that moving desires and expectations are held in combinations. While desiring to move is strongly associated with dwelling dissatisfaction or disliking the neighbourhood, mainly spatially flexible individuals such as young, highly educated private renters expect to be able to realise this desire. Older individuals, those with lower incomes and social renters tend to express a desire to move without an expectation that this will be quickly accomplished. This resonates with the theory of planned behaviour (Ajzen, 1991), as these individuals may perceive that they lack the control necessary to escape undesirable dwellings and neighbourhoods, potentially harming their quality of life. Equally, life events such as union formation and dissolution are associated with moving expectations, strongly affecting moving desires only if these are held in conjunction with an expectation. Taken together, these findings emphasise that considering combinations of pre-move thoughts is important for our understanding of the mobility process, as decision-making is often non-linear (Sell and De Jong, 1983).

This study also aimed to investigate how moving desire-expectation combinations affect subsequent moving behaviour. In the BHPS, information on moving desires, expectations and actual moving behaviour is only available at one year intervals. Given this spacing of observation intervals, it is possible that some individuals with a desire to move subsequently stopped desiring the move before their next interview. This may partially explain why the likelihood of actually moving when the move is only desired is relatively low. It is however possible that this abandonment of a desire may be a form of cognitive dissonance reduction, with respondents abandoning unattainable desires to safeguard their mental well-being. In addition, others may have quickly formed and acted upon a moving desire within the year, thereby appearing to make an unwanted move.

Despite these potential methodological shortcomings, the results provide support for the third hypothesis, showing that the combination of moving desires and expectations expressed affects the likelihood of an individual making a subsequent move. While only desiring a move is associated with a somewhat higher propensity to actually move, the likelihood of actually moving is much

greater if the move is also expected. This demonstrates that differences between individuals expressing the same pre-move thought can have a substantial impact on their subsequent behaviour. These differences are obscured if only one pre-move thought is linked to subsequent mobility. One insight gained from the analysis of desire-expectation combinations is that those individuals who do not expect to be able to make a desired move (typically social renters and those with lower incomes) are also unlikely to actually move. This indicates that neighbourhood stratification by socio-economic status may be an outcome of unfulfilled moving desires, as poorer residents may be unable to realise their desires to move out of less desirable places. This has implications for studies relying upon revealed preference approaches to investigate housing choices, as a selective group of individuals cannot realise their underlying preferences. It is important to note that while desiring and expecting a move is strongly associated with subsequent mobility, 45% of individuals reporting this combination do not move over the next year. This suggests that for many people, desires and expectations may be easily formed, but then abandoned, or behavioural responses postponed. Alternatively, it is possible that people are not able to accurately assess the feasibility of actually moving.

This study contributed to the mobility literature both empirically and conceptually. Empirically, considering combinations of pre-move thoughts has identified hitherto ignored variation between people expressing similar moving desires and expectations. This enables us to better conceptualise how different types of individuals make moving decisions, both to resolve gradual increases in housing stress and as a response to life events. The study has then explored how moving desires and expectations combine to affect subsequent actual mobility. These findings are of relevance for future longitudinal research. While it is undoubtedly valuable to link single pre-move thoughts to subsequent moving behaviour, we have shown that it may be apt to consider pre-move thoughts as combinations. By revealing substantial variations between individuals who seem to share the same thoughts about moving, such an approach enables us to create more precise models of moving behaviour.

The results also have conceptual implications. As desires and expectations are formed in different ways and have different implications for mobility, future studies need to be precise in their use of terms and take care to link these accurately to the empirical material being discussed. By considering pre-move thoughts as combinations we can better understand how life events may alter and disrupt linear decision-making processes. This will enable us to enhance our conceptual decision-making models, to more fully acknowledge the importance of housing stress and life events as triggers of mobility.

Chapter 5

Partner (dis)agreement on moving desires and the subsequent moving behaviour of couples

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Abstract

Most studies of residential mobility decision-making focus on the housing and neighbourhood satisfaction and pre-move thoughts of individuals. This implicitly assumes that individual evaluations represent the wider household unit. However, if partners in a couple do not share evaluations of dwelling or neighbourhood quality or do not agree on whether moving is (un)desirable, ignoring these disagreements will lead to an inaccurate assessment of the strength of the links between moving desires and actual moves. Although overlooked in studies of residential mobility, partner disagreement plays an important role in the literature on family migration. This study is therefore one of the first to investigate disagreements in moving desires between partners and the subsequent consequences of such disagreements for moving behaviour. Drawing on British Household Panel Survey (BHPS) data and concepts from family migration studies, we find that disagreement about the desirability of moving is most likely where partners do not share perceptions of housing stress. Panel logistic regression models show that the moving desires of both partners interact to affect the moving behaviour of couples. Only 7.6% of couples move if only the man desires to move, whereas 20.1% of shared moving desires lead to a subsequent move.

5.1 Introduction

Since the publication of Rossi's *Why Families Move* in 1955, a large literature seeking to understand the residential mobility process has developed (Dieleman, 2001). There is a tension within this body of work between conceptual models of how households make moving decisions and empirical tests of these models conducted at the individual scale. Conceptual models of residential mobility argue that moving is a household response to the housing stress generated by housing disequilibrium, with households seeking to move to dwellings and locations which better meet their changing needs and preferences (Clark and Ledwith, 2006). By emphasising the household level, such models implicitly assume that perceptions of housing stress and any resulting moving desires are shared by all members of the household. However, there is considerable evidence that moving desires and evaluations of home and neighbourhood quality are personal thoughts, expressed by individuals in response to the dissatisfaction generated by their own subjective perceptions of housing stress (eg. Landale and Guest, 1985; Lu, 1999a). This may explain Ferreira and Taylor's finding (2009) that over 20% of British couples do not agree about the desirability of moving.

Problematically, existing empirical analyses of the residential mobility process have also neglected the household context within which moving decisions are made. Many studies treat individuals as independent actors, ignoring that people often live and move together in households. Due partly to data constraints, most mobility studies follow only one member of each household, linking their pre-move thoughts to the whole household's subsequent behaviour (see Kan, 1999; Lu, 1999a). This approach implicitly assumes that the views of one individual can 'represent' the household unit, or that the desires of one person carry such weight as to largely determine household behaviour.

Interestingly, a related but largely separate literature on long distance family migration does explicitly focus on decision-making processes within households (see Cooke, 2008a for an overview). Despite offering conflicting

explanations of why households move, both the human capital and gendered migration literatures emphasise that couples and families make migration decisions at the household level (see Cooke, 2008b). It has been well-documented that such decision-making does not necessarily involve consensus between the partners; with bargaining, negotiation and trade-offs between the wants of the individual and the net gain to the household all structuring choice processes (Jarvis, 1999; Seavers, 1999). As a consequence some people move against their wishes (tied movers), while others do not move because their partner does not want to (tied stayers). Findings from the family migration literature emphasise that while the household is the site for migration decision-making, it is the interaction between individuals within the household context that determines the outcome of the mobility process.

While residential mobility may not involve as great a degree of dislocation and may therefore stimulate fewer disagreements about the desirability of moving, this may be counterbalanced by the increased potential for disagreement produced by conflicting perceptions of housing and neighbourhood quality. Excepting some initial exploration by Buck (2000a) and Ferreira and Taylor (2009), very little is known about which couples are more likely to experience moving desire disagreements or whether such disagreements affect subsequent moving behaviour. It seems likely that the desires of both partners interact to condition the subsequent mobility of a couple, with moves less likely to occur if only one partner desires to move than if this desire is shared. Failing to consider the thoughts of both partners may therefore partially explain why many longitudinal studies find that a large proportion of individuals desiring, intending or expecting to move fail to subsequently relocate (eg. Buck, 2000a; De Groot *et al.*, 2011; Kan, 1999). It is likely that in a proportion of these cases the person is tied to their current location as their partner does not wish to move.

This study aims to investigate which couples are more likely to disagree about whether moving is desirable and whether such disagreements have consequences for subsequent moving behaviour. We analyse the moving propensity of couples using eight waves of British Household Panel Survey

(BHPS) data and panel logistic regression models, taking into account (dis)agreements on evaluations of housing and neighbourhood quality and (dis)agreements on moving desires and expectations.

5.2 Background

Studies of geographic mobility have typically identified the motivation for a move using the distance moved as a proxy variable. In this framework, long distance migration events are thought to be mainly motivated by employment opportunities, while short distance residential mobility is usually undertaken to adjust housing consumption (Clark and Huang, 2004). Given that this dichotomy is increasingly being questioned (eg. Boyle *et al.*, 2009; Flowerdew and Al-Hamad, 2004), developing a better understanding of how households make moving decisions requires consideration of both the migration and residential mobility literatures. Insights and concepts from family migration research can be profitably extended to help explain how couples negotiate short distance and non-economically motivated moves.

According to Cooke (2008b), the concept of the family or the household has guided migration research for several decades. The genesis of interest in family migration is often attributed to the classic work by Mincer (1978). In this article, Mincer drew on human capital theory to argue that net household rather than individual gain drives family migration behaviour. For couples, this means that individuals may make moves which negatively affect their own labour market position (for instance through reduced earnings or temporary loss of employment), because this loss is counterbalanced by greater gains for the family as a whole. Individuals may also be forced to forgo moving for personal gain, as such a move would incur net costs to the wider family unit (Clark and Davies Withers, 2002). Mincer coined the terms ‘tied mover’ and ‘tied stayer’ to describe these situations respectively. Mincer’s argument that the household is the level at which migration decision-making occurs has informed a vast

literature, much of which has sought to explore which partner gains and loses from (im)mobility (Cooke, 2008a; Mulder and Cooke, 2009).

Within this rich literature, most studies share the basic understanding that the household is the appropriate level at which to empirically investigate the outcomes of migration behaviour. Such an approach is supported by qualitative analyses of the household decision-making processes preceding a migration event. Bailey *et al.* (2004) contend that couple households can profitably be considered as a network of socially and geographically 'linked lives'. As partners are bound together into a single family unit, finding a new location which can satisfy the demands of both individuals is difficult (particularly if both wish to be active in the labour market). This forces couples to make moving decisions cooperatively through bargaining and negotiation (Abraham *et al.*, 2010; Hiller and McCaig, 2007). Consistent with the tied mover/stayer framework, many studies find that decision-making also involves making trade-offs and individual concessions for the sake of the household (see Jarvis, 1999; Seavers, 1999).

This focus on the household as the appropriate conceptual and empirical unit of analysis is less visible in the residential mobility literature, excepting a number of studies exploring dwelling preferences and housing choice behaviour (see Dieleman, 2001). Conceptual stress-threshold models of residential mobility explain moving behaviour as a household adjustment to increases in housing stress. This stress is generated when a household lives in housing disequilibrium, residing in a dwelling and neighbourhood which no longer meets the needs and preferences of the household members (Clark and Ledwith, 2006). Households decide to move in response to rising stress, attempting to relocate to a new dwelling which better satisfies their changing needs, desires and aspirations (Brown and Moore, 1970; Rossi, 1955). Disequilibrium between current and desired housing consumption can occur rapidly, as events in the life careers of household members (such as union formation or dissolution, childbirth or changes in employment status) alter housing needs and preferences (Mulder and Hooimeijer, 1999). Housing stress can also arise more gradually, producing dissatisfaction with the dwelling or neighbourhood before

triggering the initiation of the moving process (see Lu, 1999a; Speare *et al.*, 1975).

While conceptual models of residential mobility decision-making consider the *household* as the appropriate unit of analysis, empirical tests of these models have often been conducted at the *individual* level. Thus for example, while the classic studies of Rossi (1955) and Speare *et al.* (1975) focused conceptually on the mobility of households, their empirical analyses were based around examining the opinions of only one adult individual per household. While more recent studies often recognise the weaknesses and assumptions of such an approach, the limited availability of survey data has ensured that individual level analyses of mobility decision-making and subsequent behaviour remain common (eg. De Groot *et al.*, 2011; Kan, 1999; Lu, 1999a).

These individual level analyses have yielded valuable insights into the residential mobility process and there is a growing literature documenting how individuals react to increases in housing stress. The initial response to dwelling and/or neighbourhood dissatisfaction generated by stress is usually thought to consist of expressing a desire to move. Such moving desires are relatively unconstrained, as individuals do not necessarily assess the feasibility of moving in detail before expressing a desire to move (De Groot *et al.*, 2011; van Ham and Feijten, 2008). If the individual perceives that they possess sufficient resources and there are opportunities within the wider housing market to realise their desire, an expectation of moving may be expressed as the commitment to moving increases and alternative dwellings are assessed (Sell and De Jong, 1983). Eventually a move may subsequently occur. This decision-making process can be disrupted by unplanned life events, such as losing a job or union dissolution. Such events may force individuals to change their mind about moving or alter the urgency with which a move is required (De Groot *et al.*, 2011). It is therefore important to consider combinations of pre-move thoughts to build a more accurate picture of how moving decisions are made (chapter four; Sell and De Jong, 1983).

This study argues that it is conceptually and empirically valuable to enrich this individual level approach with insights from the family migration

literature, by considering that individuals within households can disagree about the desirability of moving. It is highly likely that in the context of residential mobility, partners may not share perceptions of housing stress and hence may disagree about whether moving to reduce dissatisfaction is desirable. Barring studies by Buck (2000a), Ferreira and Taylor (2009) and Rabe and Taylor (2010), little is currently known about the occurrence or consequences of such disagreements. We might anticipate that individuals with widely differing life careers and hence different needs and priorities may be more likely to disagree about whether moving is desirable, as they are less likely to share perceptions of housing stress. We can therefore formulate a hypothesis which states that:
1) Partners are more likely to disagree about whether moving is desirable if they are less similar to one another.

It is likely that disagreements about the desirability of moving are also related to the levels of commitment tying the couple together. Embarking upon major commitments such as marriage, parenthood and homeownership restricts the freedom of the individuals involved, by constraining the future choices they are free to take. As a result, individuals typically only select themselves into such commitments when they perceive a stable, shared future (Feijten, 2005). Given that the highly committed have chosen to restrict their future options and are likely to have been a couple for longer, we might expect such couples to be unlikely to disagree about whether moving is desirable. Less committed couples may feel less pressure to compromise or adjust their desires for the sake of their relationship; thereby making them more likely to disagree about whether moving is desirable. This leads us to hypothesise that:
2) Partners are more likely to disagree about whether moving is desirable if they possess fewer joint commitments.

Disagreements about the desirability of moving may affect the subsequent moving behaviour of couples. Thus the tied mover/stayer concepts developed in the family migration literature may be usefully extended to also conceptualise household moves made over shorter distances and/or for non-economic reasons. The prospect of one partner becoming a ‘tied mover’ (which refers here to the individual who sacrifices their desire to stay for the sake of

their partner) is likely to reduce the propensity for the couple to move, when compared to couples where the partners agree that moving is desirable. If this is the case and there are substantial effects of (dis)agreement on the likelihood of individual desires being realised, this implies that a household level approach is valuable in mobility research (following Boyle *et al.*, 2001). We can therefore formulate two further hypotheses:

3) Couples are least likely to move if neither partner desires to move and are most likely to move if a move is desired by both partners.

4) Couples are less likely to move if only one partner desires to move than if both partners desire to move.

Rabe and Taylor (2010) have previously reported that the moving behaviour of couples was strongly affected by whether the woman (dis)liked the neighbourhood, although the possible mediating effects of moving desires were not considered (see Landale and Guest, 1985). Following this evidence and in light of the large literature on gendered migration, it seems relevant to investigate whether gender affects the likelihood of an individual becoming the tied partner who moves or stays against their wishes. From the migration literature, we can therefore hypothesise that:

5) Couples are more likely to move if only the man desires to move than if only the woman desires to move.

5.3 Data and methods

This study uses data from the British Household Panel Survey (BHPS). The BHPS is a panel survey initiated in 1991, when a nationally representative sample of 10,300 individuals from 5,500 UK households were selected and interviewed (Taylor *et al.*, 2010). These individuals have been re-interviewed annually on a wide range of topics, with additional households added to the panel from Scotland, Wales and Northern Ireland in 1999 and 2001. In addition to possessing a large sample surveyed over many time points, the BHPS is ideal for this project for two main reasons. The first key advantage of the BHPS

is that it gathers information about moving desires and expectations from all adults living with a sample member. This enables the construction of variables indicating (dis)agreements in moving desires and expectations between partners living in couples. A second advantage of the BHPS is its comparatively low attrition rate (Berthoud, 2000). While movers are known to be more likely to drop out of the sample than non-movers, the BHPS typically records whether individuals have moved even if they were not re-interviewed (Buck, 2000a). This enables these cases to be retained in analyses of actual moving behaviour.

This study makes use of a person-year file based on eight waves of the BHPS covering the years 1998-2006. Earlier waves could not be used as information on moving expectations was not gathered until 1998. Wave 11 (2001) cases were excluded as housing satisfaction information was not gathered during this survey sweep. Given the aims of this paper, the research population consisted of individuals who had an identified and opposite sex 'lawful spouse' or 'live-in partner' in their household. A very small number of person-years where the partners lived in an institution were excluded, as these couples are unlikely to have independent housing careers. Person-years where key household information was missing (such as housing tenure or income) were removed. Cases were also dropped where it was impossible to compute household level similarity or (dis)agreement variables, as only one partner had responded to the relevant survey question. Moving desires were coded using the response to the question '*If you could choose, would you stay here in your present home or would you prefer to move somewhere else?'* Similarly, moving expectations were identified from the response to the question '*Do you expect you will move in the coming year?*'. A small proportion of respondents replying that they 'did not know' whether they desired or expected to move were treated as having no desire or expectation of moving. This is because these individuals appear not to have given moving much thought. In addition, analysis was restricted to couples that stayed intact between two consecutive waves.

Couples were defined as 'movers' if both changed their address between *t* and *t+1* and they remained in the same household and relationship. Likewise, couples were defined as 'stayers' if neither moved and they remained partners.

This procedure takes into account that individuals may not change marital status but may change partner between waves (particularly if they cohabit). Longer observation intervals for identifying a move (for example over the subsequent 2 or 3 years) were rejected due to the phrasing of the survey questions, which explicitly obtained the respondent's moving expectations over the next year. In addition, using longer observation windows would ignore that the respondent's expressed desires and expectations may have changed at the intervening waves. If only one partner moved or both partners moved but to different households, the couple were assumed to have separated and these person-years were omitted (see Cooke, 2008b for a similar sample selection procedure). After transforming the person-year file into a couple-year format, 30,617 couple-years remained, provided by 6,675 couples over an average of 4.6 waves.

The first set of cross-tabulations linked various household level independent variables to the occurrence of disagreements in moving desires between partners. To investigate the effects of disagreements on the subsequent moving behaviour of couples, random effects (panel) logistic regression models were used (Hsiao, 2003). The dependent variable in these models is a binary variable indicating whether the household moved over the subsequent survey year (0=no move, 1=move). The control variables in these models contain lagged values, with transition variables measuring the occurrence of life events (such as changes in employment status) between the observation of moving desires at *t* and moving behaviour at *t+1*. Table 5.1 provides a summary of all variables used in these analyses. Panel models are valuable as they account for the non-independence of observations, as couple-year cases are nested within couples.

Table 5.1 Variable summary statistics (total N=30,617 couple-years)

Categorical variables	**N**	**%**
Mover couple dummy (ref=no move)	2160	7.05
Housing satisfaction (ref=both satisfied)		
man dissatisfied	3035	9.91
woman dissatisfied	3691	12.06
both dissatisfied	2834	9.26
Disliking the neighbourhood (ref=neither dislikes)		
man dislikes	1010	3.30
woman dislikes	1084	3.54
both dislike	888	2.90
Moving desires (ref=neither desires to move)		
man desires	3051	9.97
woman desires	2799	9.14
both desire	6090	19.89
Moving expectations (ref=neither expect to move)		
man expects	637	2.08
woman expects	698	2.28
both expect	2064	6.74
Cohabitation dummy (ref=married)	4839	15.80
Couple type (ref=couple, no children)		
preschool children	2669	8.72
school age children	7844	25.62
children of both ages	1966	6.42
non-dependent children	3795	12.40
other	376	1.23
Change in *n* kids *t* to *t+1* (ref=no change)		
increase	1280	4.18
decrease	1404	4.59
unknown at *t+1*	830	2.71
Highest education level (ref=very low/none)		
low (basic secondary school level)	5900	19.27
medium (higher school/vocational qualifications)	15184	49.59
high (degree and above)	6383	20.85
Employment status of the couple (ref=neither employed)		
dual earner	16851	55.04
single earner	6995	22.85
Change in *n* employed *t* to *t+1* (ref=no change)		
increase	1430	4.67
decrease	1895	6.19
unknown at *t+1*	1383	4.52
Housing tenure (ref=homeowner)		
social renter	3890	12.71
private renter	1741	5.69
Longest duration of stay in years (ref=0-1)		
2-5	6008	19.62
6-10	3348	10.94
11-20	4030	13.16
21-40	3011	9.83
>40	619	2.02
unknown	9229	30.14
Continuous variables	**Mean**	**Std. Dev.**
Highest age	49.36	15.05
Real household income(£)/10,000	3.42	2.45
Roomstress (*n* people/*n* rooms)	0.67	0.30

Source: BHPS, own calculations

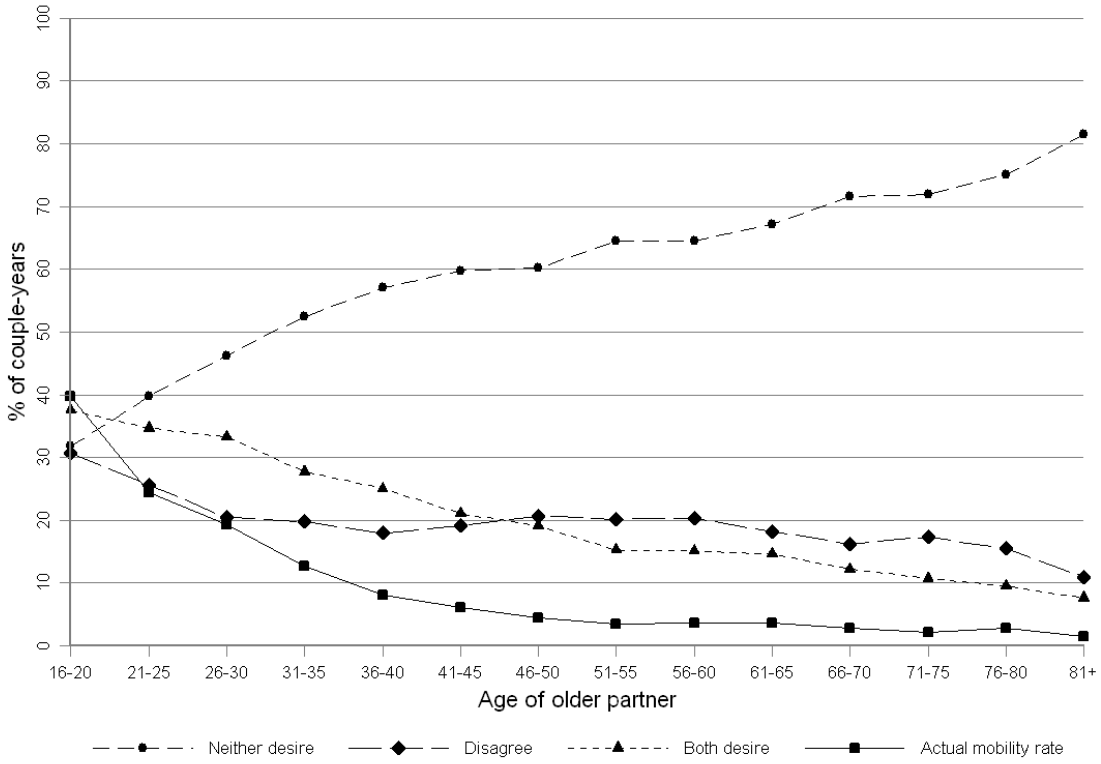
5.4 Results

5.4.1 The occurrence of disagreements

The descriptive results presented in Table 5.1 and Figure 5.1 confirm that it is important to consider the pre-move thoughts of both partners in couples. Partners often disagree about whether a move is desired (19.11% of cases) or expected (4.36% of cases). Figure 5.1 shows how partner (dis)agreement on moving desires and the actual mobility rate vary with the age of the older partner in the couple. Disagreements appear to occur fairly consistently across the life course, although younger couples are more likely to disagree than older couples. While total agreement rates remain fairly stable, the composition of this agreement shifts from desiring to move to not desiring to move as age increases. It is important to note that the actual mobility rate is consistently lower than the proportion of couples where one or both partners desire to move (sum of disagree and both desire). This suggests that many people may be unable to act upon their moving desires, or that moving desires are often unattainable and hence abandoned.

Table 5.2 presents data on the associations between partner similarity and (dis)agreement on moving desires. The results provide only weak support for the idea that partners who are demographically and socio-economically more similar to one another are less likely to disagree about whether moving is desirable. The age gap separating partners appears unrelated to the propensity for partners to disagree about whether moving is desirable, although couples separated by the largest age gaps are slightly more likely to disagree. Ethnically mixed couples are more likely to disagree than ethnically homogenous couples, despite the idea that only more committed individuals are willing to enter into such unions. A gap in educational levels between partners seems unrelated to (dis)agreement on moving desires. Both dual and single earner couples are more likely to disagree than couples where neither partner is employed.

Figure 5.1 Partner (dis)agreement in moving desires by age



The results in the lower section of Table 5.2 provide preliminary support for the contention that disagreement about whether moving is desirable is more likely when partners also disagree about the quality of their dwelling or neighbourhood. Disagreements are most likely to occur if the partners already disagree about whether they are satisfied with their dwelling or dislike their neighbourhood. Further analysis (not shown) reveals that it is almost always the partner who is unhappy with their dwelling or neighbourhood who desires to move. This suggests that individual moving desires are stimulated by personal subjective evaluations of dwelling and neighbourhood conditions (Landale and Guest, 1985). This interpretation is further supported by the strong links between shared negative evaluations (particularly of the neighbourhood) and shared desires to move: more than 96% of couples who agree on disliking the neighbourhood also share a desire to move. Couples who disagree about their housing or neighbourhood conditions also often agree that moving is desirable. This suggests that people often take their partner's happiness with their current

Table 5.2 Partner similarity and (dis)agreement on whether moving is desirable

Couple characteristic (row %)		Moving desires of the couple			Total (100% and N couple-years)
		Neither desires	Disagree	Both desire	
Age gap (years)	0-2	62.40	18.94	18.66	14360
	3-5	61.13	18.47	20.40	9146
	6-10	57.82	20.63	21.55	5225
	11-20	58.35	18.73	22.92	1671
	>21	60.00	23.26	16.74	215
Ethnic mix	Homogenous	61.20	18.98	19.82	30093
	Mixed	49.81	26.15	24.05	524
Education level gap	No gap	61.22	18.77	20.02	13044
	Small gap	61.57	18.63	19.80	12314
	Large gap	58.61	20.83	20.55	3936
	Very large gap	65.65	16.96	17.39	230
	Unknown	59.65	22.78	17.57	1093
Employment status	Dual earner	58.89	19.56	21.55	16851
	Single earner	58.81	20.20	20.99	6995
	No earner	68.53	16.85	14.62	6771
Housing satisfaction	Both satisfied	72.76	16.61	10.62	21057
	Disagree	42.52	26.08	31.40	6726
	Both dissatisfied	17.47	21.10	61.43	2834
Liking the neighbourhood	Both like	67.01	18.46	14.53	27635
	Disagree	7.35	34.43	58.21	2094
	Both dislike	0.68	3.04	96.28	888
Total (100% and N couple-years)					30617

All bivariate associations have Pearson's chi^2 p <0.01
Source: BHPS, own calculations

Table 5.3 Shared commitments and (dis)agreement on whether moving is desirable

Couple characteristic (row %)		Moving desires of the couple			Total (100% and N couple-years)
		Neither desires	Disagree	Both desire	
Marital status	Married	63.81	18.43	17.76	25778
	Cohabiting	46.06	22.71	31.23	4839
Couple's household type	Couple only	64.36	18.10	17.54	13967
	Preschool children	52.12	18.70	29.19	2669
	School age children	59.54	19.31	21.15	7844
	Children of both ages	55.14	21.31	23.55	1966
	Non-dependent children	63.11	20.58	16.31	3795
	Other	39.36	28.72	31.91	376
Housing tenure	Homeowner	63.91	18.55	17.54	24986
	Social renter	48.51	21.59	29.90	3890
	Private renter	47.16	21.54	31.30	1741
Total (100% and N couple-years)					30617

All bivariate associations have Pearson's chi^2 p <0.01
Source: BHPS, own calculations

location into account when expressing their own moving desires. This would not be visible in an individual level study.

Table 5.3 presents descriptive results linking the level of shared commitments to the relationship to moving desire (dis)agreements. There is somewhat mixed support for the commitment hypothesis, which proposed that possessing fewer joint commitments is associated with a greater propensity for partners to disagree about the desirability of moving. Disagreements are more likely among cohabiters than married couples, with cohabiters also much more likely to agree that moving is desirable. This may indicate that individuals select into marriage when they foresee that a shared future living arrangement is feasible, typically as relationship duration and stability increase. Disagreements also appear to be more common for couples with children, with the incidence of disagreement generally increasing with the age of the children (see also Ferreira and Taylor, 2009). This suggests that although families with children are fairly immobile, it is common for one or both partners to still desire to move. There is also some evidence that tenure commitments are linked to desire disagreements. Highly committed homeowning couples disagree in 18.55% of cases, whereas disagreements are slightly more common amongst renting couples (just over 21%). Again this suggests that individuals often enter committed states only when they perceive that the needs of both partners can be met through residence at a single location.

Overall, we have found little convincing evidence that levels of partner similarity are associated with moving desire disagreements. The results did show that disagreements are most likely to occur when the partners disagree about the quality of their dwelling or neighbourhood. These findings provide initial support for conceptual models of residential mobility decision-making (see Lu, 1999a). There is also some support for hypothesis two, suggesting that greater levels of commitment are associated with a reduced propensity to disagree about whether moving is desirable.

5.4.2 Desire disagreements and actual moving behaviour

Table 5.4 contains descriptive results testing the third and fourth hypotheses. The results indicate that taking the moving desires of both partners into account more accurately predicts whether couples subsequently move. The upper section of Table 5.4 links the desires of only the male partner to the couple's moving behaviour over the next year. Ignoring the views of the female partner, these results show that 15.90% of couples where the male desires to move also actually move.

The lower section of the table reveals, however, that the likelihood of the male partner's desire to move being realised is heavily dependent upon the views of his partner. If only the male partner desires to move, then a move occurs in 7.57% of cases. If both partners desire to move then a move occurs in over 20% of cases. These findings support the hypothesis that moving desires are most likely to be realised if shared by both partners. This demonstrates that linking only one partner's desires to the actual moving behaviour of the couple leads to inaccurate estimates of how strongly desires are associated with actual moves. Shared moving desires are much more likely to be realised than desires which are not shared.

Table 5.4 Moving desires and the subsequent moving behaviour of couples

Moving desires at *t*		**Subsequent couple moving behaviour *t* to *t+1***		
		Stayer	**Mover**	**Total (100% & N)**
Individual level analysis	No male desire	96.71	3.29	21476
	Male desire	84.10	15.90	9141
	Total	28457	2160	30617
Couple level analysis	Neither desires	97.29	2.71	18677
	Man desires	92.43	7.57	3051
	Woman desires	92.82	7.18	2799
	Both desire	79.93	20.07	6090
	Total	28457	2160	30617

All bivariate associations have Pearson's chi^2 p <0.01
Source: BHPS, own calculations

Table 5.5 contains the results from five panel logistic regression models estimating the likelihood of couples making joint moves. These models enable robust hypothesis testing, by controlling for the effects of background characteristics known to affect mobility. The main interest here is in how partner (dis)agreements in evaluations of housing and/or neighbourhood quality, moving desires and moving expectations, affect the moving propensity of couples. It is possible that interview conditions may have affected the measurements of (dis)agreements. It is likely that disagreements are less likely to be expressed if both partners are interviewed together. Further analysis revealed that partners are somewhat more likely to disagree if they completed the relevant section of the interview separately than if they were interviewed together. As partners were not interviewed separately in approximately 50% of cases, these analyses may undercount disagreements. To ensure that the results are robust, the models were rerun with a variable indicating the interview conditions included as an extra control. The model results were almost identical to the models without this control variable (not shown).

Model 1 includes only housing dissatisfaction and neighbourhood assessments as independent variables. The model shows that couples are more likely to move if one or especially both partners are dissatisfied with their dwelling or dislike their neighbourhood. Consistent with Rabe and Taylor's (2010) findings, moves are more likely to occur if only the woman dislikes the neighbourhood than if only the man dislikes the neighbourhood. These parameters remain strong and significant when a range of control variables (but without moving desires and expectations) are added in Model 2. In general the control variables have the effects anticipated from the literature, apart from the negative coefficient of the cohabitation dummy (although this is not significant). The propensity to move decreases with age, and couples with children are less likely to move than those without (particularly if the children are school age or older). Changes in the number of children in the household do not appear significantly linked to mobility. High levels of education are associated with a higher probability to move, while single and particularly dual earner couples are less likely to move than couples where neither partner is employed.

Table 5.5 Panel logistic regression models of the annual moving propensity of couples between *t* and *t+1*

Variable (observed at wave *t*)	Model 1		Model 2		Model 3		Model 4		Model 5	
	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
Housing satisfaction (ref=both satisfied)										
man dissatisfied	0.977***	0.081	0.690***	0.079					0.226**	0.092
woman dissatisfied	1.033***	0.074	0.790***	0.073					0.308***	0.085
both dissatisfied	1.751***	0.078	1.100***	0.077					0.130	0.091
Dislike neighbourhood (ref=both like)										
man dislikes	0.460***	0.120	0.410***	0.117					-0.122	0.135
woman dislikes	0.649***	0.111	0.620***	0.106					0.068	0.124
both dislike	0.953***	0.115	0.968***	0.109					-0.081	0.127
Desire to move (ref=neither desire)										
man desires					0.756***	0.098	0.646***	0.098	0.629***	0.100
woman desires					0.475***	0.104	0.386***	0.105	0.322**	0.108
both desire					0.969***	0.077	0.879***	0.077	0.825***	0.083
Expect to move (ref=neither expect)										
man expects					1.817***	0.125	1.417***	0.127	1.414***	0.128
woman expects					2.120***	0.115	1.738***	0.116	1.720***	0.117
both expect					3.735***	0.085	3.200***	0.084	3.197***	0.084
Highest age			-0.033***	0.003			-0.024***	0.003	-0.024***	0.003
Cohabit (ref=married)			-0.022	0.067			-0.179**	0.078	-0.181**	0.078
Couple type (ref=couple, no children)										
preschool children			-0.231**	0.084			-0.111	0.099	-0.121	0.099
school age children			-0.753***	0.081			-0.499***	0.091	-0.513***	0.091
children of both ages			-0.657***	0.110			-0.261**	0.125	-0.266**	0.125
non-dependent children			-0.634***	0.115			-0.360**	0.125	-0.361**	0.125
other			0.336**	0.169			-0.146	0.201	-0.158	0.202
Change in *n* children (ref=no change)										
increased at *t+1*			0.170	0.096			-0.046	0.114	-0.049	0.115
decreased at *t+1*			-0.080	0.143			0.010	0.162	0.009	0.162
unknown at *t+1*			2.075***	0.204			1.975***	0.231	1.987***	0.231
Highest education level (ref=very low)										
low			0.206	0.122			0.089	0.132	0.085	0.132
medium			0.131	0.117			-0.088	0.126	-0.098	0.126
high			0.378**	0.128			-0.081	0.140	-0.090	0.140

Employment status (ref=no earner)										
dual earner			-0.344***	0.098			-0.372***	0.110	-0.375***	0.110
single earner			-0.190**	0.095			-0.312**	0.107	-0.310**	0.107
Change in *n* employed (ref=no change)										
increased at *t+1*			-0.007	0.112			0.002	0.129	-0.005	0.129
decreased at *t+1*			0.459***	0.093			0.448***	0.107	0.450***	0.107
unknown at *t+1*			-0.052	0.184			-0.030	0.207	-0.033	0.207
Real household income/10,000			0.043***	0.011			0.034**	0.011	0.035**	0.011
Housing tenure (ref=homeowner)										
social renter			-0.256**	0.087			-0.164	0.097	-0.170	0.099
private renter			1.303***	0.081			0.983***	0.093	0.962***	0.094
Roomstress			0.621***	0.094			0.393***	0.109	0.371***	0.110
Longest duration of stay (ref=0-1 years)										
2-5			-0.098	0.073			-0.178**	0.084	-0.181**	0.084
6-10			-0.215**	0.106			-0.392***	0.115	-0.398***	0.115
11-20			-0.375**	0.118			-0.567***	0.126	-0.571***	0.126
21-40			-1.123***	0.172			-1.213***	0.183	-1.218***	0.183
>40			-0.881**	0.362			-1.066**	0.379	-1.080**	0.380
unknown			-0.633***	0.089			-0.743***	0.097	-0.750***	0.098
Intercept	-3.634***	0.058	-1.823***	0.233	-4.192***	0.072	-2.454***	0.269	-2.482***	0.270
Rho	0.277	0.019	0.066	0.021	0.167	0.023	0.064	0.024	0.067	0.024
Log likelihood (improvement over null)	-7210.81(482.92)		-6273.13(1420.60)		-5329.71(2364.02)		-4871.34(2822.39)		-4862.75(2830.98)	
Wald chi^2 (d.f.)	854.35(6)		2037.42(34)		2576.79(6)		2586.47(34)		2580.61(40)	
N(n groups)	30617(6675)		30617(6675)		30617(6675)		30617(6675)		30617(6675)	

***=*p*<0.001 **=*p*<0.05

Source: BHPS, own calculations

Interestingly, reductions in the number of people in employment are also associated with moving. This may be due to moves related to retirement. With higher levels of income the likelihood of moving increases. Private renters are more likely to move than those in other housing tenures, while room stress is also associated with a greater propensity to move. The longer people stayed in their current dwelling, the less likely they are to move. Further analyses (not shown here) demonstrate that there is little evidence of any significant regional or period effects on moving behaviour.

Model 3 only includes the moving desires and expectations of both partners. The results support both hypotheses 3 and 4. Desiring to move is associated with a greater propensity to actually move, particularly if this desire is shared between partners. Shared moving expectations are very strongly linked to mobility, although moves are also likely if only expected by one partner (especially if the woman expects to move). The effects of moving desires and expectations remain stable when control variables are included in Model 4. Most of the control variable parameters are similar to those in Model 2, although there are some minor changes in significance levels (for instance education level becomes insignificant). Model 4 fits the data much better than Model 2, as shown by the considerably lower log likelihood value in Model 4. This suggests that desires and expectations are more strongly linked to actual moves than evaluations of dwelling and neighbourhood conditions.

Finally, Model 5 contains all variables included in the previous models. Most of the control variables have similar effects to those estimated in the previous models. The most important finding is that some of the effects of housing satisfaction and all of the effects of disliking the neighbourhood become insignificant when desires and expectations are included in the same model. This indicates that subjective evaluations of dwelling and neighbourhood conditions are associated with moving desires and expectations, with these desires and expectations in turn conditioning the propensity to move (Lee *et al.*, 1994; Rossi, 1955). Rabe and Taylor (2010) have previously reported that whether the female partner dislikes the neighbourhood has a particularly strong effect on whether the household subsequently moves. While this is correct,

these results demonstrate that this is also partially dependent on how disliking the neighbourhood affects the moving desires and expectations of both partners. Interestingly, after also controlling for moving desires and expectations, couples remain significantly more likely to move if only one partner is dissatisfied with their dwelling than if both are satisfied. This suggests that housing dissatisfaction can in some circumstances have an independent effect on mobility behaviour.

The moving desire parameters continue to support the hypotheses. Moves are more likely to occur if desired by one partner than if neither partner desires to move, although shared desires most closely predict subsequent moves. In support of hypothesis five there is some evidence of a gender effect, as men are more likely than women to realise their moving desires if they are unsupported by their partner. However, women appear to be better in predicting a move then men (see parameters for moving expectations). Again, this slightly nuances Rabe and Taylor's findings (2010), as it is men who are more successful than women in translating a moving desire into an actual move.

Overall, the modelling results demonstrate the value of conducting analysis at the household level, taking into account the views of both partners. This study showed that it is important to consider the satisfaction and pre-move thoughts of both partners, as the impacts these factors have on actual mobility differs depending upon whether they are shared or held by only one partner. The results also support conceptual models of residential mobility, as dissatisfaction stimulates moving desires and expectations, which in turn affect actual moving behaviour (see Lu, 1999a).

5.5 Conclusions

In contrast to the family migration literature, residential mobility studies have often neglected the importance of the household as the site for mobility decision-making. In the residential mobility literature, conceptual models of decision-making have tended to view households as unified social units that

move in response to housing stress. Empirical tests of these models have often taken the views of only one person as the determinant of the subsequent moving behaviour of the household as a whole. These conceptual and empirical approaches neglect the complexity of decision-making within couple and family households, where the decision about whether or not to relocate is likely to involve both partners (Dieleman, 2001). As individual perceptions of housing stress and dissatisfaction are known to motivate mobility, partners may not always agree that moving is desirable.

The first aim of this paper was therefore to assess which couples are more likely to disagree about the desirability of moving. The results show that the degree of life course similarity between the partners is only weakly predictive of disagreement, although there is some evidence that joint commitments such as homeownership are associated with a slightly lower propensity for partners to disagree. In contrast, couples reporting differing perceptions of housing stress are much more likely to disagree about whether moving is desirable. Objective household composition therefore seems of considerably less significance than individual perceptions of housing stress as a predictor of disagreement. Interestingly, couples are likely to agree that moving is desirable even when only one partner is unhappy with their dwelling or neighbourhood conditions. This indicates that people are willing to consider moving for the sake of their partner. These findings demonstrate that it is important to think of households as collections of linked lives (Bailey *et al.*, 2004), recognising that individual sacrifice is often necessary to build household consensus.

These findings led us to explore whether disagreements between partners over whether moving is desirable has impacts for the subsequent moving behaviour of households. Given the one-year spacing of BHPS observations, it is possible that the moving desires of one or both partners changed without our knowledge in the interval between expressing their desires at time point *t* and the observation of their actual moving behaviour at *t+1*. Nevertheless, the results clearly demonstrate that an individual desire to move is much more likely to be realised if shared by both partners. Although recent

research shows that housing and neighbourhood dissatisfaction increases the propensity for individuals and households to make residential moves (Diaz-Serrano and Stoyanova, 2010; Rabe and Taylor, 2010), this effect appears to be mediated by moving desires and expectations (Landale and Guest, 1985; Lee *et al.*, 1994). After controlling for satisfaction there is also some evidence of a gender effect, as men are more likely to act upon their desires in the event of a disagreement than women. This finding suggests the value of extending the tied mover/stayer framework into studies of short distance and non-economically driven mobility. The prospect of one partner becoming a tied mover dampens household mobility, while women are more likely than men to fail to realise their desires in the event of a disagreement.

The findings of this study have implications for the development of residential mobility theory and future empirical research. The results clearly show that only taking the views of one partner into consideration when analysing the mobility behaviour of couples biases the outcomes. Partners can disagree on housing and neighbourhood (dis)satisfaction and moving desires, and the relative weight of each partner's views influences subsequent moving behaviour. A household level approach where the views of both partners are taken into account enables us to more accurately model who realises their moving desires and expectations, by treating the views of the partner as further enabling or constraining factors. The existence and behavioural consequences of disagreements are also important for our understanding of housing disequilibrium and household composition. While households may appear to experience equilibrium between their housing supply and consumption, this may only be possible because individuals within the household are prepared to remain in a state of personal disequilibrium as tied movers or stayers. This may have impacts for household composition, potentially undermining partnership stability or contributing to long term decreases in life satisfaction and well-being for the tied partner (see Ferreira and Taylor, 2009). This study suggests that considering the housing satisfaction and prior moving desires of both partners in couples allows us to better understand why households move or remain in place.

Chapter 6

Following people through time: An analysis of individual residential mobility biographies

Forthcoming in *Housing Studies* as: Coulter, R. and van Ham, M. Following people through time: An analysis of individual residential mobility biographies.

Abstract

The life course framework enables us to investigate how experiencing particular life events affects residential mobility decision-making and behaviour throughout individual lifetimes. However, most longitudinal studies linking mobility decision-making to subsequent moving behaviour adopt a snapshot approach by analysing year-to-year transitions. As a result, little is known about how moving desires and subsequent mobility relate over longer periods of time within the context of dynamic life course trajectories. This study moves beyond investigating year-to-year snapshots by analysing the long term *sequencing* of moving desires and mobility behaviour within individual lives. Using innovative techniques to visualise the desire-mobility sequences of British Household Panel Survey respondents, the study demonstrates that the meanings and significance of particular transitions in moving desires and mobility behaviour become apparent only when these transitions are arranged into individual mobility biographies. The results highlight the oft-neglected importance of residential stability over the life course, uncovering groups of individuals persistently unable to act in accordance with their moving desires.

6.1 Introduction

Over the last twenty five years, research examining the residential mobility of households has been enriched by situating residential moves within the context of the life course (Clark and Davies Withers, 2007). Within this framework, mobility is conceptualised as a mechanism which enables households to adjust their housing, neighbourhood and locational consumption to meet their changing needs and preferences (Clark and Ledwith, 2006). Events and gradual changes in the life courses of household members are understood to initially produce housing disequilibrium, thereby triggering the mobility decision-making process (Mulder and Hooimeijer, 1999).

The initial reaction to disequilibrium is often conceptualised as the expression of a desire to move (Sell and De Jong, 1983). Over time, moving desires can be succeeded by an expectation of moving and an eventual move response, providing that the individual is not restricted or constrained by household or macro contextual factors. A growing literature has begun to investigate this decision-making process, linking individuals' expressed pre-move thoughts to their subsequent moving behaviour (eg. De Groot *et al*., 2011; Lu, 1999a). These studies have developed our understanding of which individuals are able to act upon their prior desires and expectations of moving. Yet although this literature makes use of longitudinal data, few studies have yet adopted a 'true' life course approach when analysing mobility decision-making and behaviour. Most studies only examine short snapshots of individual life courses, either by analysing year-to-year transitions or by investigating whether individuals thinking about moving at year *t* have done so at *t+x* (eg. De Groot *et al.*, 2011; Lu, 1999a).

Although studying year-to-year transitions has yielded important insights into the mobility decision-making process, focusing on short periods within individual lives somewhat neglects key conceptual features of the life course approach. Fundamentally, the life course framework enables us to conceptualise how events and states are ordered and experienced over long periods of biographical and historical time (Feijten, 2005). In addition, a focus

on life courses emphasises the importance of the household and macro contexts within which decision-making and life events (do not) occur (Dykstra and van Wissen, 1999). Conceptually, analyses of mobility decision-making and behaviour ought therefore to be situated within the long-term trajectories of individual lives. Without adopting a long term and longitudinal perspective, we cannot distinguish people whose moving desires are ephemeral from those who persistently desire to relocate.

Investigating the ordering of pre-move thoughts and subsequent behaviour across individual life courses requires an important adjustment of our analytical framework. Analysing how moving desires and mobility behaviour are sequenced implies a shift away from explaining variation *between* individuals, towards an emphasis on variation over time *within* each person (Aisenbrey and Fasang, 2010). This focus on sequences will enable us to better situate our knowledge of specific transitions within the wider context of life course trajectories (Pollock, 2007; Stovel and Bolan, 2004). Just as individual photographs gain greater meaning when ordered and compiled into albums, so the meanings and significance of experiencing (un)desired (im)mobility may only become apparent when located within the long-term mobility biographies of individuals (see Gershuny *et al.*, 1994). The meaning of experiencing an (un)desired move may, for example, only become apparent when it is known whether or not the person is subsequently content in their new location.

Analysing the sequencing of moving desires and mobility behaviour may also develop our understanding of how individuals experience and react to housing disequilibrium over the life course. A variety of factors can inhibit people from relocating, even if they report that moving is desirable. For some people, intangible factors such as life aspirations, cultural values or social and kin networks may bind them to their current location, despite the tangible benefits which could be accrued elsewhere (Lundholm *et al.*, 2004). Household resources and the macro scale opportunity structures of regional housing and labour markets are also known to condition whether an individual is able to move when this is desired (Mulder and Hooimeijer, 1999). Yet no research has considered whether some individuals may be *persistently* unable to act in

accordance with their moving desires. This could be either through a consistent inability to act upon a moving desire, or through repeatedly moving against their will. Understanding what distinguishes these individuals from those who quickly realise their moving desires is particularly important given the continuing impacts of the global financial crisis on the British housing and labour markets.

With this in mind, this study has two central aims. The first aim of the paper is to gain insight into individual mobility biographies by investigating how moving desires and actual moves are sequenced over individual life courses. Secondly, the study aims to develop our understanding of the links between individual mobility biographies and events occurring elsewhere in the life course. To address these aims, this study is one of the first to construct individual mobility biographies. Drawing upon a sample of British Household Panel Survey (BHPS) respondents tracked for up to 17 years, sequence analysis techniques and graphical plots are used to situate these mobility biographies within the wider context of life course trajectories. By tracking individuals over a long period of time, this study harnesses the full power of panel data.

6.2 Conceptual framework

6.2.1 Disequilibrium and the life course model

It has been well documented that households relocate to reduce the disequilibrium generated when their housing supply and geographical location no longer meet their changing needs and preferences (Clark and Ledwith, 2006). To conceptualise how disequilibrium is experienced by individuals, Brown and Moore (1970) argued that living with disequilibrium produces housing ‘stress’. When stress rises past an acceptable internally defined threshold, households begin to search for dwellings and neighbourhoods which they anticipate will better satisfy their new needs and preferences (Brown and Moore, 1970).

The root cause of disequilibrium is often linked to the distance a household is prepared to move (Niedomysl, 2011). A large literature has shown that people typically migrate over long distances for economic reasons. In this literature, migrants are thought to move to improve the income of their household, to invest in their human capital (via education or training), or to relocate to places which are perceived to offer greater access to job opportunities (see Böheim and Taylor, 2002; Sjaastad, 1962). In contrast, shorter distance residential mobility is often thought to be driven by a desire to adjust housing and neighbourhood consumption (Niedomysl, 2011). Households are thought to be reluctant to move long distances for housing and neighbourhood reasons, as it is usually possible to resolve this disequilibrium locally without the need for a costly and disruptive long distance move (Mulder and Hooimeijer, 1999).

There is, however, increasing evidence that this residential mobility-migration dichotomy is becoming less certain in contemporary Western societies. Cross-national survey evidence suggests that economic factors may be a precondition rather than a motivation for many long distance moves. Several studies have shown that many households move long distances to enhance their quality of life, providing that they can also maintain their economic participation and income levels at the destination (eg. Boyle *et al.*, 2009; Morrison and Clark, 2011; Niedomsyl, 2011). Social and kin ties, as well as cultural affiliations, are also known to influence many long distance movers (Lundholm, 2007; Michielin *et al.*, 2008; Pettersson and Malmberg, 2009).

Our understanding of how individuals and households experience and respond to these diverse causes of disequilibrium has been enhanced by situating analyses of residential mobility within the conceptual framework of the life course (Clark and Davies Withers, 2007). Adopting a life course approach guides us to think of individual lives as unique *biographies* (Dykstra and van Wissen, 1999). Each individual biography is created by the life events a person experiences. Conceptually, life events can be grouped into separate household, housing, education and labour force 'life careers' (Mulder and Hooimeijer, 1999). These careers run in parallel and are linked together, as events in one

career can impact upon the trajectories of the other careers. As households can be thought of as networks of 'linked lives' (Bailey *et al.*, 2004), events in the lives of other household members also influence individual biographies.

A key contribution of the life course model is the recognition that it is not only the occurrence of events, but also the *sequence* and contexts within which these events are experienced, that produces life careers and the overall individual biography (Dykstra and van Wissen, 1999; Feijten, 2005). For example, childbirth can have different impacts on individuals depending on the age of the parents, the household structure within which the child is born and whether the birth takes place before or after marriage. To understand an individual's present situation requires that we therefore also understand their past biography and life career trajectories (Dykstra and van Wissen, 1999). This means that we must follow the same individuals over long periods of time to fully understand the causes and consequences of specific life events (Feijten, 2005).

6.2.2 Residential mobility within a life course framework

Many studies of residential mobility decision-making and behaviour adopt a life course approach, emphasising that events within the life careers of household members create disequilibrium and hence motivate relocation (Mulder and Hooimeijer, 1999). Although the life course model requires us to situate our analyses of mobility within the context of long-term life careers and mobility histories, most longitudinal analyses focus upon year-to-year transitions (Stovel and Bolan, 2004). These studies have shown that certain life events necessitate immediate residential moves, which may not be desired or anticipated (De Groot *et al.,* 2011). Such events are considered to constitute mobility *triggers*, as an individual has to move to resolve the sudden occurrence of disequilibrium (Michielin and Mulder, 2008). For instance, forming or dissolving a partnership typically requires at least one partner to relocate (Feijten and van Ham, 2010). A large proportion of trigger events occur in the household careers of individuals, as educational and employment events usually trigger moves only if

the event forces the individual to adjust their daily activity space (Mulder and Hooimeijer, 1999).

As trigger events force rapid relocations, a year-to-year analytical framework seems at first glance to be an appropriate way to investigate how these events are linked to mobility decision-making and behaviour. Yet ignoring the longer term life course trajectories and mobility biography within which these relocations occur may be problematic in two ways. Firstly, such an approach neglects the possibility of anticipatory effects, even though the anticipation of events such as marriage and childbirth has been linked to residential moves (Michielin and Mulder, 2008). Secondly, failing to situate mobility within long-term individual biographies ignores the possibility that moves can have long lasting effects on future decision-making. This can happen because certain events constrain the immediate moving decisions of individuals, affecting their subsequent moving desires and behaviour. This can occur directly, for instance when an individual has to move to a certain location to form a partnership or access a particular workplace.

Perhaps more importantly, life events can also indirectly constrain the housing choice set available to individuals by altering the resources available to the household. Unanticipated events necessitating immediate moves and events involving household changes may cause individuals to lack the time or resources to choose a new dwelling and location which meets their needs. Such moves may therefore actually create or perpetuate disequilibrium, necessitating further adjustments in response to the moving desire this disequilibrium creates. For example, Feijten and van Ham (2010) show that separation and divorce often impact on individual mobility behaviour for several years after the dissolution event. These long lasting impacts of life events on residential (im)mobility may only become visible when we situate specific events and transitions within a long-term individual mobility biography.

While disequilibrium can arise rapidly and directly trigger relocation, gradual changes in the life career trajectories of individuals can also incrementally produce housing stress and stimulate the decision to move (Mulder and Hooimeijer, 1999). Rossi (1955) identified the changing space

needs of individuals as they move through different household types as the key factor in this gradual production of housing stress. In Rossi's model, experiencing increasing housing stress triggers the desire to move to a more suitable dwelling and location (see also Brown and Moore, 1970). This approach was extended by Speare *et al.* (1975), who argued that the link between housing stress and the desire to move is mediated by dissatisfaction.

Influenced by these pioneering studies, a growing body of work has sought to investigate the links between mobility decision-making and subsequent moving behaviour. Several studies have examined both who desires to move and how these expressed moving desires affect the subsequent moving behaviour of households (see chapters four and five; Buck, 2000a; Ferriera and Taylor, 2009; Landale and Guest, 1985). Although studies are becoming increasingly sensitive to the importance of household contexts (Ferreira and Taylor 2009), few have situated their analyses within the context of long-term mobility biographies. This is problematic, as the generation of housing stress can occur gradually over long periods of time. Analysing who acts upon a moving desire between only two time points means that we cannot separate people who have desired to move for fifteen years from those who only began to think about moving within the last year. These may be qualitatively different forms of moving desire, which if left unrealised may have very different consequences for individual well-being.

Adopting a longer term approach may be particularly valuable for investigating *why people do not move*, even though they may wish to do so. Existing studies have shown that the ability to act upon a desire to move is heavily dependent upon the micro context of the household (Mulder and Hooimeijer, 1999). Household characteristics such as income, housing tenure and the caring, work and social ties of household members all condition the ability of households to move when this is desired by one or more household members (chapter five). Macro contextual factors such as the structure of labour and housing markets also constrain the choice set available to individuals desiring to relocate (Clark and Dieleman, 1996). Uncovering whether certain individuals are consistently unable to act in accordance with their

moving desires can only be accomplished through a long-term and longitudinal analysis of the sequencing of moving desires and actual moving behaviour over individual life courses. Developing such an approach is the fundamental contribution of this study.

6.3 Data and methods

6.3.1 Data and sample selection

In order to track the same individuals over a long period of time, this paper makes use of British Household Panel Survey (BHPS) data covering the years 1991-2007. The BHPS was initiated in 1991, when a nationally representative sample of over 10,000 adults from around 5,500 households was drawn from 250 postcode sectors across Great Britain (Taylor *et al.*, 2010). These Original Sample Members (OSMs) completed interviews covering a wide range of topics and have been tracked and re-interviewed each subsequent year. At each wave after the initial sweep, new individuals could also enter the BHPS sample. To ensure that all mobility biographies could be the same potential length, this study used only the records of OSMs first contacted in 1991. Due to the high risk of death truncating the histories of older respondents, the sample was further restricted to adult OSMs who were of working age (16 to 64) in 1991. This left a potential sample of 8,113 people. The records of these individuals were transformed into person-year format prior to analysis.

Each year, the BHPS has collected information on the moving desires of respondents. These were identified through the response given to the question *'If you could choose, would you stay here in your present home or would you prefer to move somewhere else?'* This question guides individuals to express their moving desires rather than their moving intentions or plans, as respondents are directed to try and ignore any constraints which they think may prevent them from actually moving. A small number of individuals who replied that they 'did not know' whether they desired to move were treated as having no

moving desire, as they appeared to have given moving little prior thought. Subsequent moving behaviour was then coded at each wave based upon whether the person was observed to have changed address between waves *t* and *t+1*. This time gap was chosen to maximise the level of detail within each person's mobility biography.

Constructing mobility biographies required information on moving desires and subsequent moving behaviour for each respondent at every survey wave. Given these stringent requirements, participant attrition and wave non-response meant that some OSMs had to be discarded as they did not provide full mobility histories. Participant attrition is a problem shared by most panel surveys (Taris, 2000), and can only be fully avoided through the use of retrospective data or population registers. These data sources are however unsuitable for this project, as neither gathers the necessary subjective data (such as on moving desires) collected repeatedly by prospective panel surveys such as the BHPS.

Attrition poses a particular problem for longitudinal research if it is selective (Taris, 2000). Preliminary bi- and multi- variate analysis (results not shown here) suggests that younger OSMs, men, ethnic minorities, singles and OSMs with a low level of education were more likely to fail to provide information on moving desires and actual moving behaviour at all survey sweeps. We also anticipate that serial movers are somewhat under-represented in the complete mobility histories, as the attrition of BHPS respondents is known to be associated with geographical mobility (Buck, 2000a). These findings are in line with well-documented patterns of attrition in most panel surveys (Taris, 2000).

Two steps were taken to minimise the impact of participant attrition on the analysis of mobility biographies. Firstly, longitudinal imputation was used to 'fill in' small gaps on the moving desire variable by making use of the moving desires the respondent reported at the previous and subsequent waves. In addition, respondents were considered to have a complete history if data on their moving desires and subsequent moving behaviour was available for at least the eleven consecutive waves following the first survey sweep. Taken together, imputation and the inclusion of slightly truncated sequences enabled a

sample of 4,912 individuals to be included in the analyses (61% of eligible OSMs). Of these 4,912 histories, 13% contain imputed cases. As attrition rates in the BHPS were highest in the first few waves of data collection (see Taylor *et al.*, 2010), a large proportion of excluded histories were much too short to be included in the analyses (even with imputation). To be certain that the results are robust to the inclusion of imputed cases, all analyses have been rerun with imputed sequences excluded (results not shown). This procedure demonstrated that imputation does not change the substantive findings.

6.3.2 Methods

By comparing an individual's expressed moving desire at time *t* with their observed moving behaviour at *t+1*, an 'element variable' was then coded to categorise each person-year based upon the combination of moving desire and mobility behaviour observed at that year (Table 6.1). By tracking the ordering of this element variable across all the person-years provided by each respondent, it was then possible to create 4,912 individual sequences of moving desires and actual moving behaviour. These mobility biographies can be visualised as a series of 4,912 individual timelines which represent how each respondent moves through each of the states in Table 6.1 over time (see Figure 6.1). These timelines were plotted in Stata v.10.1 using the third-party SQ-Ado bundle of Stata programs (Brzinsky-Fay *et al.* (2006) for full details).

Table 6.1 Combinations of moving desire and subsequent moving behaviour

Moving desire at wave *t*	**Actual moving behaviour between waves *t* and *t+1***	
	No move	**Move**
No desire	Desired stayer	Undesired mover
Desire	Undesired stayer	Desired mover

Within these plots, each horizontal line contains the mobility history of an individual from 1991 onwards. The timeline is colour coded for each of the years the person was interviewed, based upon the combination of moving desire and

subsequent behaviour observed at that survey sweep. Each category in Table 6.1 is therefore assigned a different colour and it is the sequence of these states experienced by each individual which makes up their mobility biography. White lines at the end of sequences indicate that the person's history was truncated by missing data. As all OSMs had to provide at least twelve consecutive years of data on moving desires and subsequent moving behaviour to be included in the sample, each respondent can have a maximum of 4 white years at the end of their sequence.

While the intra-household dimension of mobility decision-making has been the subject of a growing literature (chapter five; Ferreira and Taylor, 2009), this paper does not investigate intra-household variation in the type of sequence experienced. The focus on individual sequences rather than just one sequence per household seems justified, as individuals can move through many different household situations over a seventeen year period. In addition, prior research shows that intra-household disagreement over whether moving is desirable is common (chapter five; Ferreira and Taylor, 2009). Hence it would be conceptually problematic to attempt to think of overall 'household histories', as each individual within each household experiences their own desire-mobility sequence across the study period.

6.4 Analysis

Most studies linking mobility decision-making to subsequent moving behaviour investigate the likelihood of individuals realising their pre-move thoughts across several waves of a longitudinal study (eg. De Groot *et al.*, 2011; Lu, 1999a). Table 6.2 replicates this focus on wave-to-wave transitions for all pairs of person-years in the sample. The results hint that state dependence is common for stayers, as both desired and undesired stayers (people who desire to move but who do not immediately realise this desire) are most likely to remain in the same state across two consecutive survey waves. Mobility typically resolves

Table 6.2 Moving desires and subsequent moving behaviour across two consecutive survey waves

Moving desire and subsequent moving behaviour at *t*	Moving desire and subsequent moving behaviour at *t+1*				Total (100% and N)
	Desired stayer	Undesired stayer	Undesired mover	Desired mover	
Desired stayer	83.23	11.81	2.88	2.08	44715
Undesired stayer	21.21	67.66	1.32	9.82	21587
Undesired mover	57.50	16.63	11.06	14.81	2026
Desired mover	61.98	19.27	7.07	11.68	3887
Total (% and N)	62.82	29.04	2.87	5.26	72215

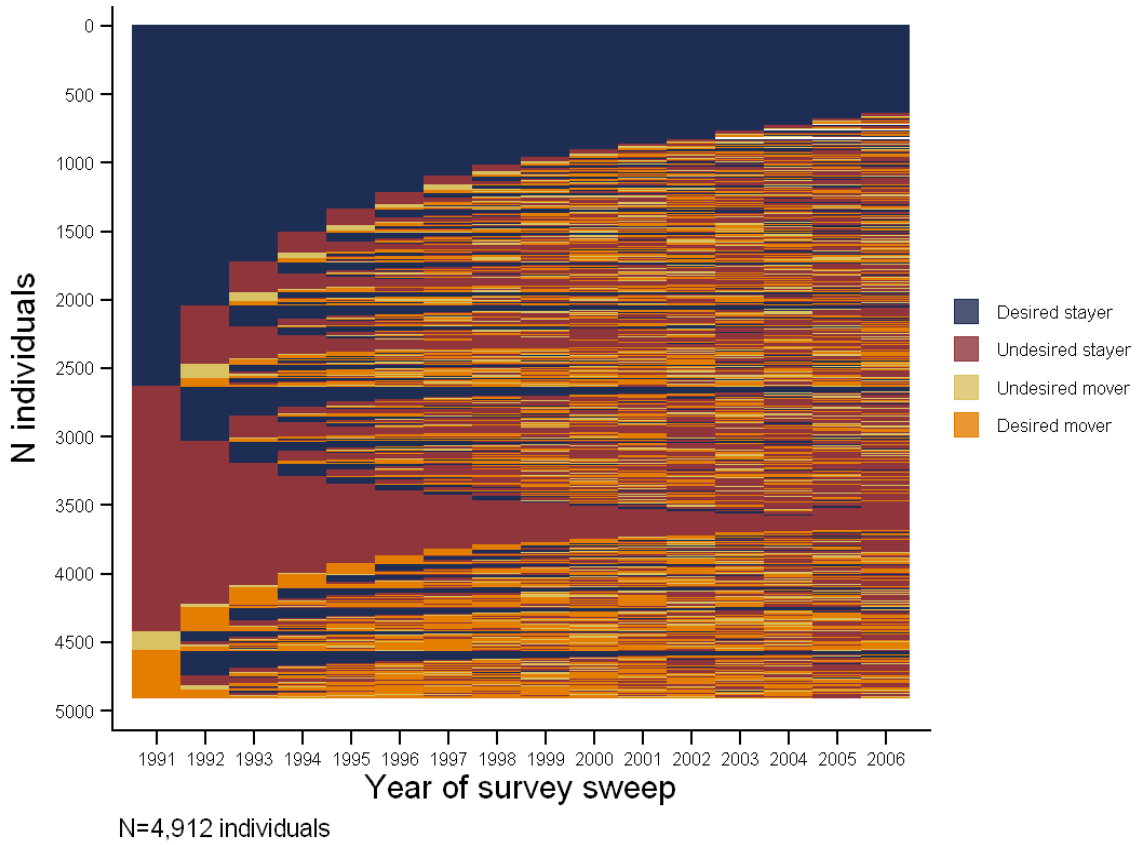
Pearson chi^2 $p<0.001$
Source: BHPS, own calculations

disequilibrium, as the majority of (un)desired moves are followed by the individual becoming a desired stayer. Intriguingly, there are comparatively small differences in the subsequent states of individuals making desired and undesired moves.

While informative, Table 6.2 does not enable us to investigate how these transitions are situated within the wider life course trajectories of individuals. For instance, we do not know whether the stability within the undesired stayer category is caused by a small number of individuals remaining undesired stayers for a long time, or whether many individuals experience short spells in this state. As a result, we can infer little about the meaning or long-term consequences of an individual experiencing a particular transition from this wave-to-wave approach. The meaning and consequences of remaining an undesired stayer over two waves is likely to be highly dependent upon the wider sequence of moving desires and mobility behaviour within which this experience is situated.

To focus upon individual mobility biographies, Figure 6.1 provides a visualisation of the sequences of moving desires and moving behaviour experienced by all 4,912 sample members after 1991. Each horizontal line represents the sequence of one individual, with the coloured blocks indicating the combination of moving desire and subsequent behaviour recorded at each survey wave (Table 6.1). The figure shows that there are considerable regularities in the types of sequence experienced. Large numbers of individuals remain desired stayers for very long periods of time, while the steadily diminishing cones of undesired stayers indicates that many people also spend long periods harbouring a frustrated moving desire. This seems to validate Cooke's (2011) assertion that an empirical focus on *immobility* is important if we are to develop our understanding of the meaning and consequences of mobility. This is only possible by tracking the same individuals' moving behaviour over long periods of time.

Figure 6.1 The mobility biographies of selected BHPS respondents

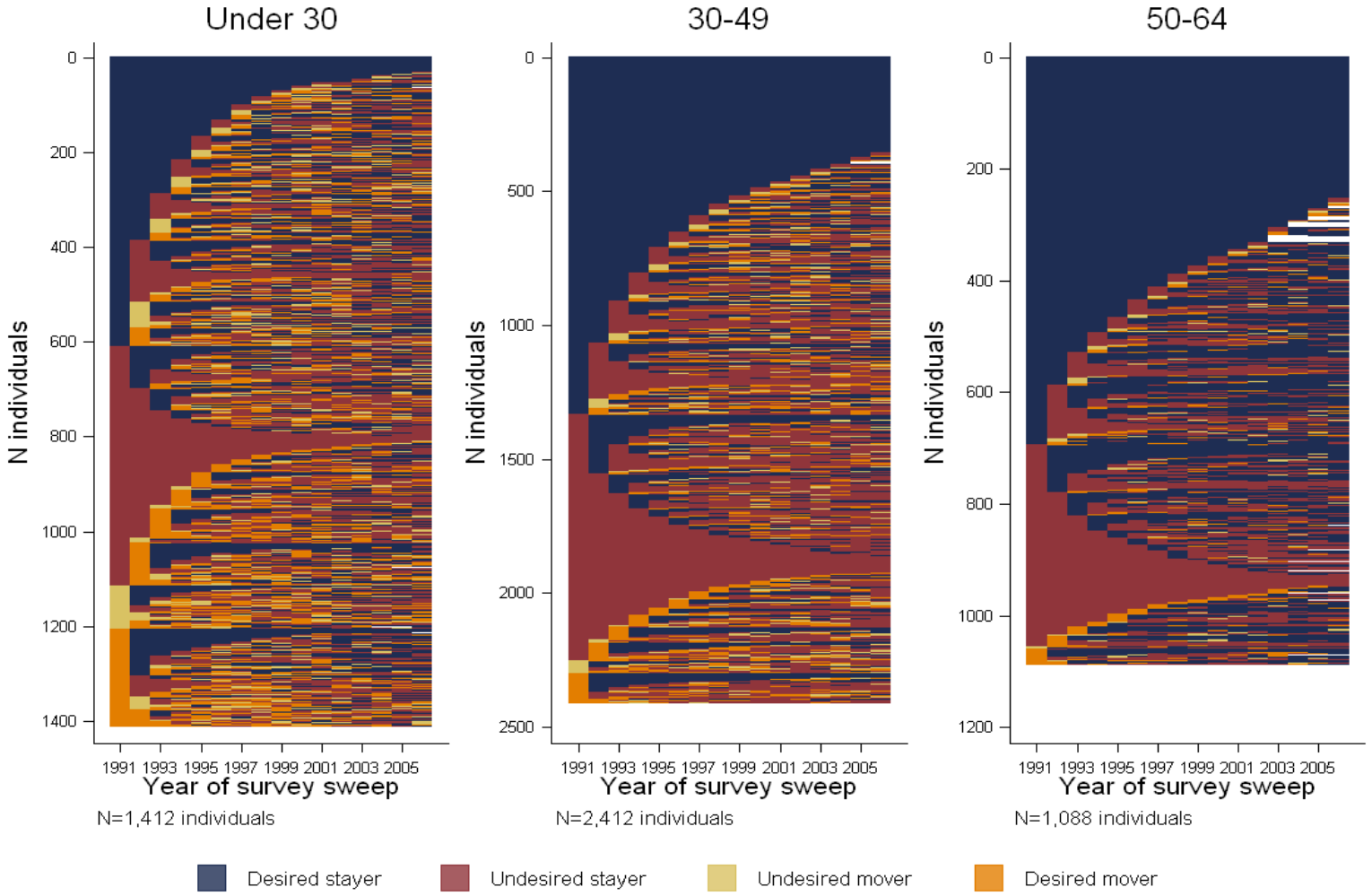


Source: BHPS

The long blue tails (signifying spells as a desired stayer) visible after many move events in Figure 6.1 imply that moving is often a positive experience, meeting the needs and preferences of individuals. While it is also clear that many people have highly complex mobility histories, overall the figure highlights the value of situating each transition within a longer term context. This enables us to identify individuals for whom the same year-to-year transition may have widely differing meanings and implications. For example, while some people appear to remain undesired stayers for long periods of time, others oscillate in and out of this state or subsequently manage to become content by relocating.

By grouping all sequences into one plot, Figure 6.1 follows individuals across different stages of their life courses. As many studies show that the propensity to move varies systematically with age (Clark and Dieleman, 1996), Figure 6.2 presents the mobility sequences of individuals subdivided by the

Figure 6.2 Mobility biographies subdivided by the age of the respondent in 1991



Source: BHPS

respondent's age in 1991. The figure shows that sequence stability increases with age, as a greater proportion of older people remain desired stayers for long periods of time. This increase in stability does not necessarily signify increased contentment, as a larger proportion of older individuals appear to remain as long term undesired stayers (as the red cones increase in size as age increases). While sequence stability increases with age, sequence complexity simultaneously drops. Few people in the oldest age band make multiple moves, while it is comparatively unusual for younger people to never move.

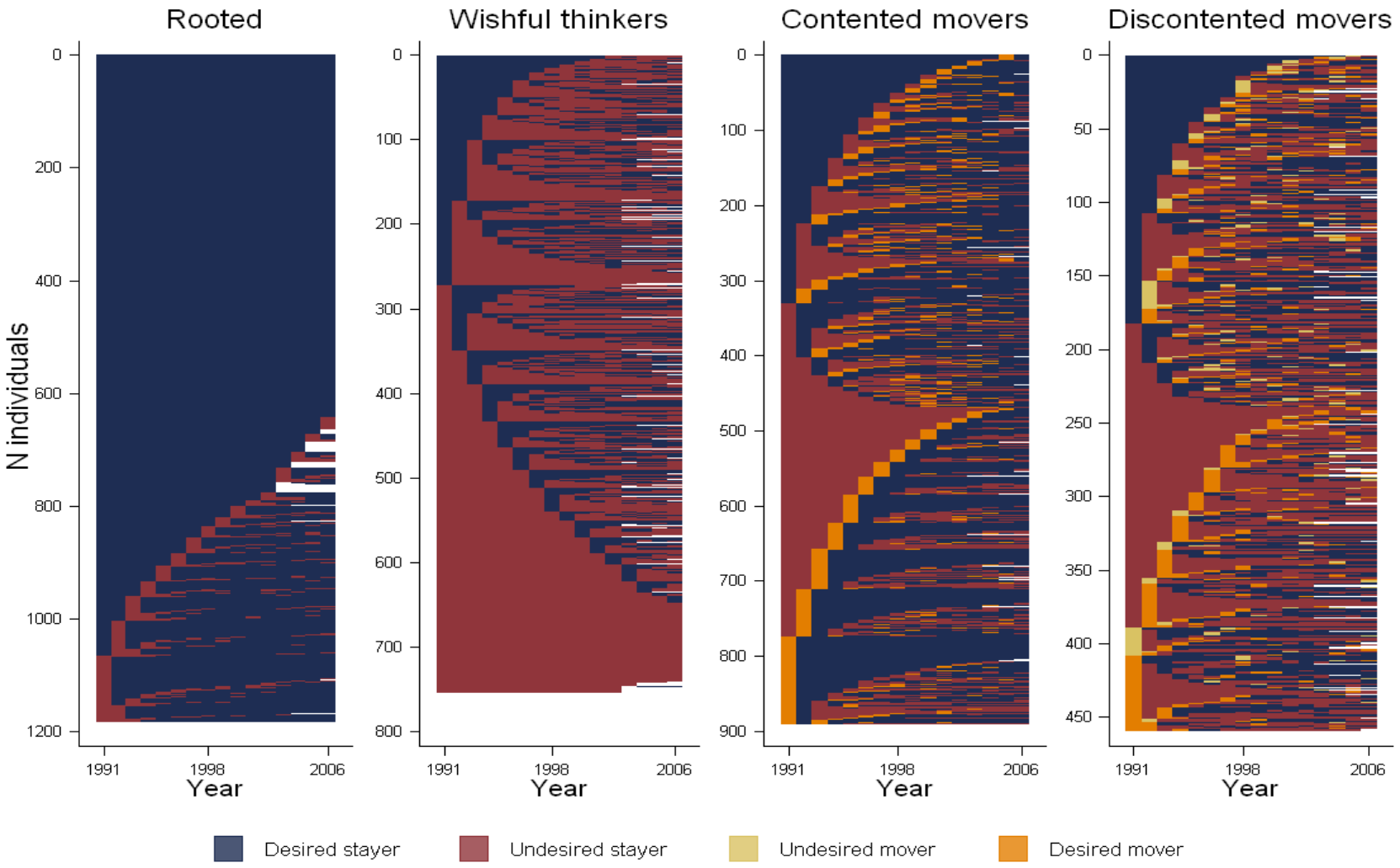
Although age is clearly an important factor for explaining sequence type, Figure 6.2 demonstrates that individuals across the age brackets also experience similar sequences (such as making a desired move and then becoming a desired stayer). Life events which can occur at different ages (such as changing jobs or forming new partnerships) obviously impact on the type of sequence experienced. By highlighting the lack of an unambiguous relationship between age and mobility sequences, the plot shows that mobility decision-making and behaviour cannot be fully understood within a more normative life cycle approach.

Studies investigating the sequencing of life course events typically seek to classify the identified sequences into a typology (eg. Clark *et al.*, 2003b; Pollock, 2007). This often involves the use of optimal matching (OM) methods (Abbot and Tsay, 2000). OM analyses involve choosing a cost scheme and using algorithms to compute the 'distance' between all pairs of sequences (Aisenbrey and Fasang, 2010). These distances can then be used to group the sequences using cluster analysis (Pollock, 2007). In this paper, a series of theoretically informed rules are used to classify sequences into groups. As with OM methods, this approach can be considered to be "an empirically informed subjective decision" (Pollock, 2007: 171). Rules are used to ensure that the identified groupings have conceptual relevance, with individuals allocated to groups based upon the (non)observance of particular states and transitions in their sequences. Using these rules we identified eight types of mobility history: the rooted, wishful thinkers (c.f. Sell and De Jong, 1983), contented movers, discontented movers, adaptive movers, oscillators, the highly mobile and

Table 6.3 Sequence groupings and classification rules (N=4,912 individuals)

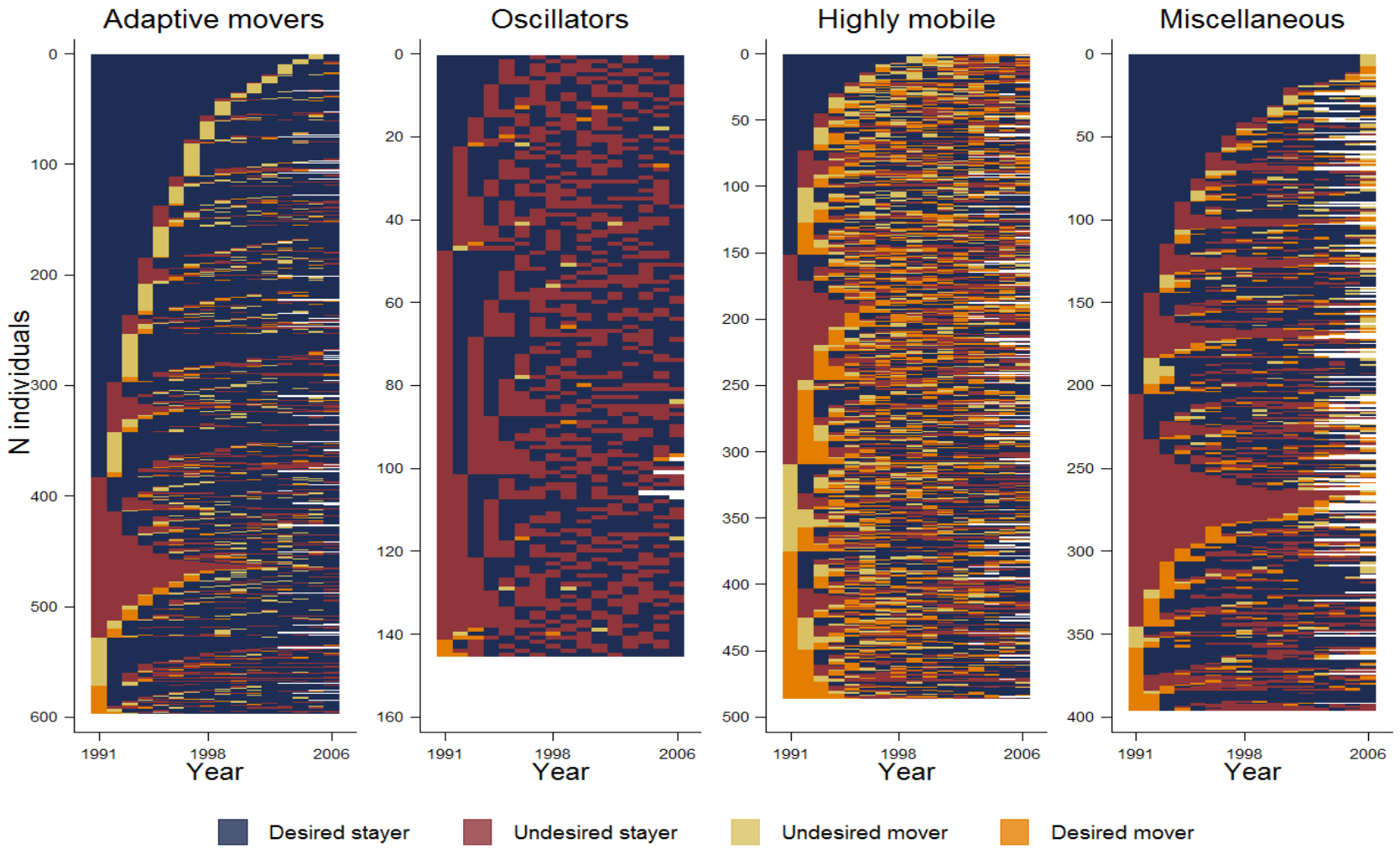
Sequence group	N_i (%)	Rules for identification	Description
Rooted	1184 (24.1)	1) Never move 2) Desire to move at fewer than 4 waves	Rooted individuals have very stable histories. They never move across the period and rarely express a desire to relocate. When moving desires are expressed, these are largely ephemeral.
Wishful thinkers	754 (15.4)	1) Never move 2) Desire to move in at least 4 waves 3) Abandon 3 or fewer moving desires	Wishful thinkers never move despite regularly and consistently expressing a moving desire. Wishful thinkers rarely abandon their desires to move.
Contented movers	891 (18.1)	1) Make up to 3 desired moves 2) Make no undesired moves 3) All moves are followed by a spell as a desired stayer	These individuals make one or more desired moves, often after desiring to move for many years. These moves relieve disequilibrium, as contented movers always become desired stayers following relocation.
Discontented movers	459 (9.3)	1) Make up to 3 (un)desired moves 2) Abandon 3 or fewer moving desires 3) No more than 50% of moves are followed by a spell as a desired stayer	Discontented movers are individuals for whom moving often fails to satisfy their needs and preferences. These individuals frequently report desiring to move again immediately after relocating.
Adaptive movers	597 (12.2)	1) Make >=1 undesired moves and <=3 total moves 2) Abandon 3 or fewer moving desires 3) All undesired moves are followed by a spell as a desired stayer	These individuals differ from contented movers as they make at least one undesired move. Adaptive movers do not seem disadvantaged by these moves, as they always subsequently become a desired stayer.
Oscillators	145 (3.0)	1) Abandon at least 4 moving desires 2) Make fewer than 3 moves	Oscillator sequences are characterised by the frequent expression and abandonment of moving desires.
Highly mobile	486 (9.9)	1) Make at least 4 moves	These sequences are characterised by frequent moves. Many highly mobile individuals also report desiring to move for considerable periods of time.
Miscellaneous	396 (8.1)	1) Sequences which cannot be classified according to the above rules	Many of these sequences are unclassifiable due to truncation or because it is difficult to evaluate the consequences of moves made in the final BHPS sweep. Other sequences in this category are highly complex.

Figure 6.3a A typology of mobility biographies



Source: BHPS

Figure 6.3b A typology of mobility biographies continued



Source: BHPS

miscellaneous. The identification rules and a description of the main group features are contained in Table 6.3.

Figures 6.3a and 6.3b present plots of the individual sequences within each group. Overall, the plots demonstrate that there is a high degree of regularity in the types of sequence experienced by individuals. A large proportion of individuals never move (the rooted and wishful thinkers). Of those individuals who do move, many frequently make desired moves which seem to resolve their housing disequilibrium (contented movers). Comparatively few individuals consistently desire to move immediately after making previously (un)desired moves (discontented movers). Interestingly, many individuals do not appear to be disadvantaged by moving when this was not desired (adaptive movers). Relatively few individuals also repeatedly express and abandon moving desires (oscillators) or make multiple moves within the study period (highly mobile). While there is undoubtedly heterogeneity within each category, the plots demonstrate that there are also clear patterns in the long-term sequencing of moving desires and actual mobility behaviour over life courses. This has not been the subject of previous research.

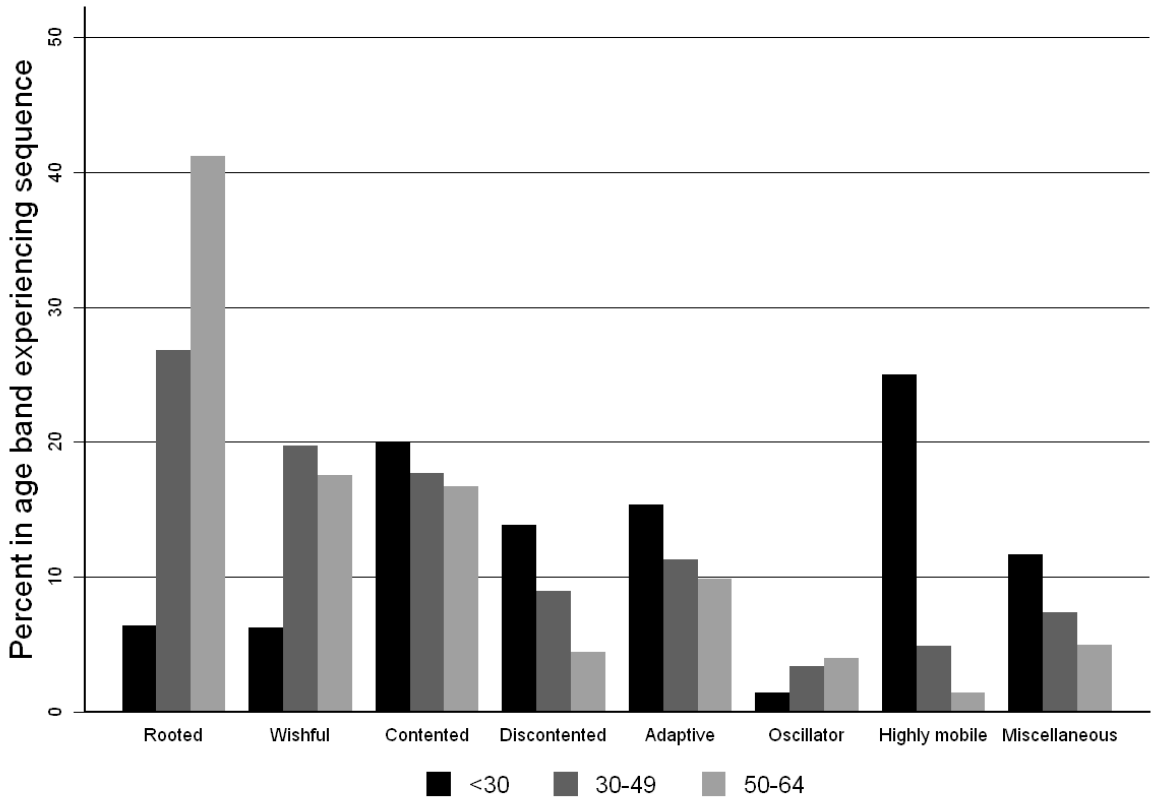
Figures 6.3a and 6.3b also deepen our understanding of the heterogeneous meanings and consequences of spending time in particular states. For instance, the meaning and significance of experiencing a spell as an undesired stayer clearly varies across the groups. While wishful thinkers consistently express a desire to move, the moving desires of oscillators are much more ephemeral. This may indicate that individuals in these two groups wish to move for different reasons. The meaning of experiencing a spell as a desired stayer also varies by group. For the rooted and for contented movers, such spells indicate contentment with the current dwelling and neighbourhood. In contrast, discontented movers and oscillators may experience spells as desired stayers after reluctantly abandoning an unattainable desire to move. For these individuals, spells as a desired stayer may indicate that the respondent has jettisoned their desire to move to reduce the cognitive dissonance induced by an inability to relocate.

Following individuals over a long period of time also deepens our understanding of the varied meanings and consequences of moving or experiencing transitions in states. While the desired moves of contented movers appear to satisfy their needs and preferences, making desired moves seems to be a less positive experience for discontented movers and for the highly mobile. These individuals often desire to relocate again immediately after moving. Similarly, making undesired moves can be both a positive and a disruptive event. Although adaptive movers do not appear disadvantaged by undesired moves, discontented movers typically wish to relocate again immediately after making an undesired move. These split experiences suggest that we observe two forms of undesired mobility. Individuals who do not appear disadvantaged by undesired moves may, in fact, have actually desired to move, although this remains unobservable because the desire was first expressed just before the move took place. Alternatively, such individuals could have come to accept that the benefits to be gained from moving outweighed the unwanted disruption of relocating. In contrast, individuals who are disadvantaged by an undesired move may have actively wished to stay in their current dwelling but have been forced out by exogenous circumstances, such as the demands of their partner's job or union dissolution. This complexity of meanings and experiences can only be observed if we track the desires and behaviour of individuals over long periods of time. Such an approach helps us to situate our understanding of specific transitions and continuity in states within the wider life courses of individuals.

One of the main challenges for studies investigating the sequencing of life course careers has been to explain the patterns observed (Wu, 2000). Using sequence type as the dependent variable, we now seek to analyse how the trajectories of other life course careers are associated with the mobility sequences people experience. As Figure 6.2 shows that the type of sequence experienced varies with age, Figure 6.4 displays the percentage of individuals in each age bracket in 1991 experiencing each type of sequence. Broadly speaking, the expected patterns are evident. As age rises, the probability of an individual being rooted increases, while the likelihood of being a contented or

discontented mover drops. Individuals over 30 in 1991 are unlikely to be highly mobile. Interestingly, 30-49 year olds are the most likely to be wishful thinkers. This may be because family and career ties to locations often peak at this stage in the life course. While the complexity of many youthful sequences means that young individuals are slightly over-represented in the miscellaneous category, the proportions of middle aged and older individuals are fairly similar.

Figure 6.4 The likelihood of experiencing each sequence type by age in 1991



Source: BHPS, own calculations

To analyse how mobility biographies are linked to the wider trajectories of individual life courses, we now estimate a series of statistical models with sequence type as the dependent variable. This required the construction of a series of independent variables summarising the trajectory of each respondent's household, housing, education and labour force careers over the study period (Table 6.4). To avoid breaching the Independence of Irrelevant Alternatives

Table 6.4. Variable summary statistics (N individuals=4,912)

Categorical variables	Frequency	%
Age of respondent in 1991 (ref=30-49)		
under 30	1412	28.75
50-64	1088	22.15
Female dummy (ref=male)	2696	54.89
Partnership trajectory during mobility sequence (ref=stable couple)		
stable single	426	8.67
enter couple	448	9.12
exit couple	325	6.62
fluctuate between couple and single	659	13.42
incomplete trajectory	595	12.11
Presence of dependent children in household during mobility sequence (ref=never present)		
always children	461	9.39
no children-children	548	11.16
children-no children	1076	21.91
fluctuate between children and no children	590	12.01
incomplete trajectory	632	12.87
Modal education level during mobility sequence (ref=no qualifications)		
low (basic secondary school level eg. GCSE)	1302	26.51
medium (higher school/vocational qualifications eg. A Level)	1885	38.38
high (university degree and above)	637	12.97
unknown	34	0.69
Housing tenure trajectory during mobility sequence (ref=stable homeowner)		
stable renter (social or private)	504	10.26
enter ownership	394	8.02
exit ownership	169	3.44
fluctuate between renting and owning	595	12.11
incomplete trajectory	348	7.08
Continuous variables	**Mean**	**Std. deviation**
Log median household income during mobility sequence[1]	10.00	0.50
Variance in log household income during mobility sequence[1]	0.21	0.39

[1] Annual household incomes were adjusted to 2005 values and deflated using the McClements Before Housing Costs equivalence scale, to take into account differences in household size and composition

Source: BHPS, own calculations

assumption (IIA) of the multinomial logit model, we estimate a series of six separate logistic regression models (Table 6.5). Each model analyses the propensity for individuals to experience a given sequence type (excluding miscellaneous sequences). The reference category for each model is contented movers. Contented movers are used as the reference category as we are interested in how the independent variables affect mobility experiences and not

just moving propensities. In each model, a small number of individuals missing data on education level were removed. The Cox-Snell pseudo-r^2 values indicate that the models' explanatory power varies. While the rooted, discontented movers and the highly mobile are predicted well, the logit models for adaptive movers and oscillators fit poorly. This suggests that these categories are the least distinct, perhaps due to internal heterogeneity or because unobservable factors distinguish these respondents from contented movers.

Individuals are more likely to be rooted than contented movers if they are older, without children, homeowners or with a low income. Wishful thinkers appear quite similar, although both young and older individuals are less likely than the middle aged to experience this type of sequence. This may be due to unobserved factors such as occupational ties. The strong negative effect of household income suggests that a lack of resources persistently hinders the realisation of moving desires. The likelihood of being discontented with moves appears to rise if the person is female, single or changes marital status. This latter result may indicate that further adjustments are needed to resolve the housing disequilibrium generated by household changes. A volatile income, perhaps associated with a fractured employment history, is also associated with discontentment, as is changing tenure (particularly exiting homeownership or having a complex housing career). Individuals are most likely to be adaptive rather than contented movers for similar reasons. These findings suggest that undesired moves can be both positive and negative experiences, as adaptive movers are more likely to be entering partnership or exiting homeownership.

Oscillators are poorly predicted by their model, although there is tentative evidence that individuals who are younger, gain children and those with higher incomes are less likely to oscillate than act successfully upon their moving desires. The highly mobile parameters are as expected. Older individuals and those with more stable life courses appear less likely to be highly mobile. Overall, the lack of significant education effects is unanticipated, although these effects may be captured by close associations between education and income.

Table 6.5 Six logit models estimating the likelihood of experiencing each sequence type (ref=contented mover)

Variable	Rooted		Wishful		Discontented		Adaptive		Oscillator		Highly mobile	
	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
Age in 1991 (ref 30-49)												
<30	-1.022***	0.158	-0.868***	0.161	0.020	0.158	0.072	0.142	-0.627**	0.292	0.730**	0.223
50-64	0.371**	0.142	-0.278*	0.160	-0.612**	0.237	-0.116	0.185	0.353	0.278	-1.087**	0.410
Female	-0.017	0.102	-0.120	0.111	-0.440**	0.134	-0.078	0.114	-0.286	0.192	-0.251	0.196
Partnership sequence (ref stable couple)[1]												
stable single	0.082	0.176	-0.047	0.201	0.589**	0.251	-0.027	0.223	0.265	0.340	-0.075	0.425
enter couple	-1.220***	0.297	-0.741**	0.280	0.917***	0.213	0.824***	0.187	-0.254	0.454	1.090***	0.301
exit couple	0.125	0.215	-0.058	0.246	0.690**	0.272	0.644**	0.224	0.392	0.354	0.384	0.441
fluctuates	-0.500**	0.231	-0.259	0.229	1.085***	0.215	0.694***	0.195	-0.152	0.431	2.171***	0.275
Children sequence (ref never children)[1]												
always children	-0.313	0.196	-0.468**	0.217	0.037	0.264	-0.228	0.224	0.363	0.355	-0.426	0.407
no children-children	-1.270***	0.244	-0.857***	0.244	0.100	0.241	-0.200	0.202	-1.810**	0.762	0.063	0.335
children-no children	0.184	0.147	0.231	0.161	0.134	0.220	0.113	0.178	0.706**	0.285	0.116	0.336
fluctuates	0.136	0.208	0.060	0.224	0.542**	0.249	0.181	0.224	0.939**	0.343	0.845**	0.333
Modal education level (ref very low)												
low	0.020	0.148	-0.069	0.159	-0.174	0.219	-0.065	0.176	0.527*	0.284	-0.098	0.322
medium	-0.176	0.146	-0.097	0.156	0.107	0.205	-0.181	0.173	0.378	0.280	-0.019	0.321
high	-0.122	0.203	-0.191	0.225	-0.037	0.274	-0.100	0.226	-0.098	0.434	0.420	0.389
Median log of hhd. income	-0.397**	0.128	-0.894***	0.140	-0.220	0.163	-0.087	0.136	-0.506**	0.239	0.086	0.229
Variance in log hhd. income	0.018	0.177	-0.137	0.231	0.641**	0.221	0.336	0.213	0.434	0.314	1.335***	0.323
Housing tenure sequence (ref stable owner)[1]												
stable renter	-0.637***	0.184	-0.314*	0.186	0.622**	0.233	0.301	0.204	-0.512	0.341	1.910***	0.347
enter ownership	-1.136***	0.215	-0.515**	0.208	0.553**	0.204	0.328*	0.177	-0.808**	0.409	1.190***	0.289
exit ownership	-3.732***	0.744	-2.978***	0.743	1.438***	0.286	0.534*	0.275	-0.515	0.532	2.935***	0.389
fluctuates	-1.536***	0.417	-0.781**	0.398	2.122***	0.245	1.208***	0.250	-0.584	0.653	4.316***	0.290
Constant	4.775***	1.306	9.397***	1.427	0.644	1.691	0.123	1.400	2.945	2.436	-4.662*	2.385
Loglikelihood	-1201.104		-997.775		-713.995		-941.447		-378.350		-384.718	
(improvement over null)	(208.827)		(125.862)		(147.167)		(51.756)		(40.364)		(502.953)	
Chi^2 (d.f.)	417.655 (23)		251.724 (23)		294.335 (23)		103.511 (23)		80.727 (23)		1005.907 (23)	
Cox-Snell pseudo-r^2	0.183		0.143		0.197		0.068		0.075		0.521	
N	2064		1630		1343		1476		1031		1368	

* $p<0.1$, ** $p<0.05$, *** $p<0.001$ [1] These variables also include categories for incomplete sequences (parameters not shown)

Source: BHPS, own calculations

The results from the models clearly demonstrate the close links between the type of mobility biography experienced and the trajectories of other life course careers.

6.5 Conclusions

This study is one of the first to investigate how individuals express moving desires and experience residential mobility over long periods of time. Although many studies have adopted a life course framework when linking moving desires to subsequent moving behaviour, most empirical analyses have been based around the analysis of year-to-year transitions. This approach has yielded valuable insights, but only provides snap-shots of individual mobility biographies. This paper argues, in line with life course theory (see Dykstra and van Wissen, 1999), that the meanings and consequences of experiencing mobility events can be better understood when these are situated within life course biographies. By constructing individual mobility histories using novel techniques, this study fits within a growing body of literature seeking to empirically operationalise the concept of long-term life course trajectories (see Abbott and Tsay, 2000; Aisenbrey and Fasang, 2010; Pollock, 2007; Stovel and Bolan, 2004). Investigating mobility histories enables us to therefore link the empirical study of residential mobility more closely to life course theory.

Three sets of findings are of particular relevance for our understanding of the links between mobility decision-making and behaviour. Firstly, the results highlight that the meanings and consequences of experiencing particular combinations of moving desire and behaviour will vary depending upon how these states and transitions are situated within wider mobility biographies. Remaining an undesired stayer for fifteen years is likely to be a much more negative experience than desiring to move for two years before relocating. Equally, a long-term approach seems valuable if we are to understand the heterogeneous consequences of particular move events. While some individuals seem to adapt quickly to undesired moves, others are left unfulfilled

by desired mobility. This suggests that resolving housing disequilibrium may often take a considerable period of time and multiple residential moves. This cannot be analysed using a snapshot approach. Alternatively, some individuals may have such dynamic life careers that relocations are regularly desired. This heterogeneity of experiences is missed in year-to-year analyses. To develop our understanding of how mobility thoughts relate to subsequent behaviour, it seems valuable to track individuals over long periods of time.

The importance of immobility throughout the life course is the second key insight provided by an empirical examination of sequences. While wave-to-wave analyses implicitly privilege move events, Figures 6.1-6.3 remind us that mobility (or even desiring to move) actually occurs relatively infrequently within individual life courses. After reaching age 30, immobility seems to be the norm for many individuals. These findings support Cooke's (2011) contention that mobility research could be enhanced by greater consideration of *why people do not move* (also Hanson, 2005), especially when moving may provide them with new opportunities.

An increased focus on stability seems particularly pertinent as the results show that many immobile individuals want to move but are persistently unable to do so. This finding would seem to suggest that place attachment and social or kin ties cannot explain the immobility of many individuals, as we would expect these factors to inhibit individuals from even expressing a desire to move. Clearly, many individuals are unable to 'reveal' their housing preferences through relocation. Greater focus on these wishful thinkers would therefore be valuable, particularly given the reduced opportunities to move in the currently depressed UK housing and labour markets. Understanding the barriers persistently inhibiting desired mobility may also become increasingly relevant as the British population ages over the next few decades, as people are known to make most of their residential moves early in the life course.

Identifying and characterising persistently disadvantaged groups of wishful thinkers and discontented movers is this paper's final empirical contribution. These groups can only be identified by adopting a long-term life course perspective. Low levels of income appear to be a greater barrier than

family ties in persistently preventing individuals from acting from upon their moving desires. This could prove deleterious for the well-being of poorer individuals, if unmet moving desires are linked to worsening psychological outcomes as a result of living in dissatisfactory dwelling and neighbourhood conditions (see Ferreira and Taylor, 2009). In contrast, discontentment with mobility seems associated with changes in household situation. There is also evidence that fluctuating incomes and changes in housing tenure (particularly exiting homeownership) are linked to negative experiences of moving. This may be because these life events trigger unwanted moves, which in turn produce further disequilibrium and dissatisfaction as individuals may lack either the resources or the time to select a desirable new dwelling and neighbourhood.

Conceptually, the results show that it is valuable to adopt a biographical approach when studying mobility decision-making and behaviour. People's pre-move thoughts and their moving behaviour at a given time point cannot be easily understood without some knowledge of their past experiences of (im)mobility. Although common in qualitative studies, the biographical framework adopted by this paper remains rare within the quantitative literature. While data constraints have traditionally inhibited work of this kind, the continuing investment in panel and linked register datasets should enable further quantitative analysis of residential mobility and other life course biographies.

Chapter 7

Wishful thinking and the abandonment of moving desires over the life course

Forthcoming in *Environment and Planning A* as: Coulter, R. Wishful thinking and the abandonment of moving desires over the life course.

Abstract

Many longitudinal analyses of residential mobility decision-making use two or three waves of panel survey data to investigate who fulfils their moving desires. Few studies have, however, focused upon individuals who desire to move but who remain residentially immobile, either because it takes them a long time to relocate or because they abandon their moving desire. This is problematic, as undesired residential immobility could have negative consequences for individual well-being and prosperity. To address this research gap, this study uses 1991-2008 British Household Panel Survey data to analyse the duration and abandonment of moving desires. Importantly, the results show that the risk of abandoning a desire to move rises dramatically with age, suggesting that the well-documented residential rootedness of older people is not solely volitional. Event history analysis shows that these patterns are partly due to changing levels of ties and commitments over the life course. By demonstrating that ethnicity and income are also linked to the fulfilment of moving desires, the findings contribute to our understanding of the processes producing both social inequality and neighbourhood stratification.

7.1 Introduction

In response to Sheller and Urry's (2006) call for a new mobilities paradigm in social science, researchers are becoming increasingly interested in identifying, conceptualising and analysing a huge variety of practices and experiences of mobility. Perhaps unsurprisingly, this 'mobilities turn' has been enthusiastically embraced by many scholars interested in migration and residential mobility behaviour (King, 2012). As a result of this growing interest in movements and mobilities, comparatively few attempts have been made to better understand the considerable periods of time many people spend living in the same dwelling and neighbourhood (Cooke, 2011; King, 2012). This is somewhat surprising, given that most people relocate relatively infrequently and as spatial moorings remain important for migrants (King, 2012).

While many studies treat residential immobility as a homogenous process defined by an absence of moves (Hanson, 2005), not moving can be either a choice or the outcome of a lack of choice. Making this distinction requires separating 'rooted' non-movers who do not desire to move from those 'wishful thinkers' who harbour a desire to relocate (Sell and De Jong, 1983). Given the costs and disruption induced by residential moves, as well as the increasing ease of using long commutes or teleworking as a substitute for migration, it is unsurprising that many people choose to relocate relatively infrequently (Fischer, 2002). However, it also seems likely that many immobile people desire to move but are unable to do so. Life course theory suggests that this may be because household scale restrictions, such as low levels of income or the needs of dependent children, constrain people's freedom to relocate (Mulder and Hooimeijer, 1999). In addition, the macro context may inhibit desired residential moves. This is likely be particularly relevant in the current economic context, as research shows that many households find moving to be increasingly difficult during housing busts and periods of high unemployment (Ferreira *et al*., 2010; Hacker, 2000).

Residential immobility is likely to be a much less positive experience for wishful thinkers than for rooted individuals who have chosen not to move. As

people seek to move to adjust their housing consumption to satisfy their changing needs over the life course (Clark and Huang, 2004), a persistent inability to satisfy these needs through relocation may have negative effects on individual well-being and prosperity (Ferreira and Taylor, 2009). This may pose a particular problem for the social justice agenda, if individuals who live in the least desirable places are those who also lack the resources to fulfil their moving desires. At the macro scale, the operation of housing and labour markets may be hindered if people cannot realise their moving desires by 'matching' themselves to appropriate job and dwelling vacancies (Wheaton, 1990).

Most previous analyses of moving desires have explored which individuals who wish to move at year *t* have actually moved by year *t+x* (chapter four; Landale and Guest, 1985; Speare *et al*., 1975). As a result, little is known about the length of time it takes individuals to fulfil their moving desires through relocation. This is problematic, as spending long periods of time desiring to move is likely to have greater negative consequences than being immediately able to fulfil a moving desire. In addition, research has neglected that wishful thinkers can also exercise their agency while not moving. Conceptually, this can occur through the *abandonment* of moving desires, either in response to unexpected life events (De Groot *et al.*, 2011) or because the person perceives actually moving to be impossible. Desire abandonment could therefore be seen to be an important strategy for the reduction of cognitive dissonance, which Festinger *et al*. (1956) argued occurs when people harbour two conflicting cognitions (in this case that moving is desirable but also impossible). As most studies focus only on who acts upon their moving desires, little is known about whether individuals abandon their moving desires when actually moving is not feasible.

To investigate these issues, this study uses data from the British Household Panel Survey (BHPS) to address two interlinked objectives. Firstly, the study aims to enhance our understanding of the emergence and duration of wishful spells. Secondly, the paper seeks to gain insight into why people abandon their moving desires. By focusing upon the duration of wishful spells

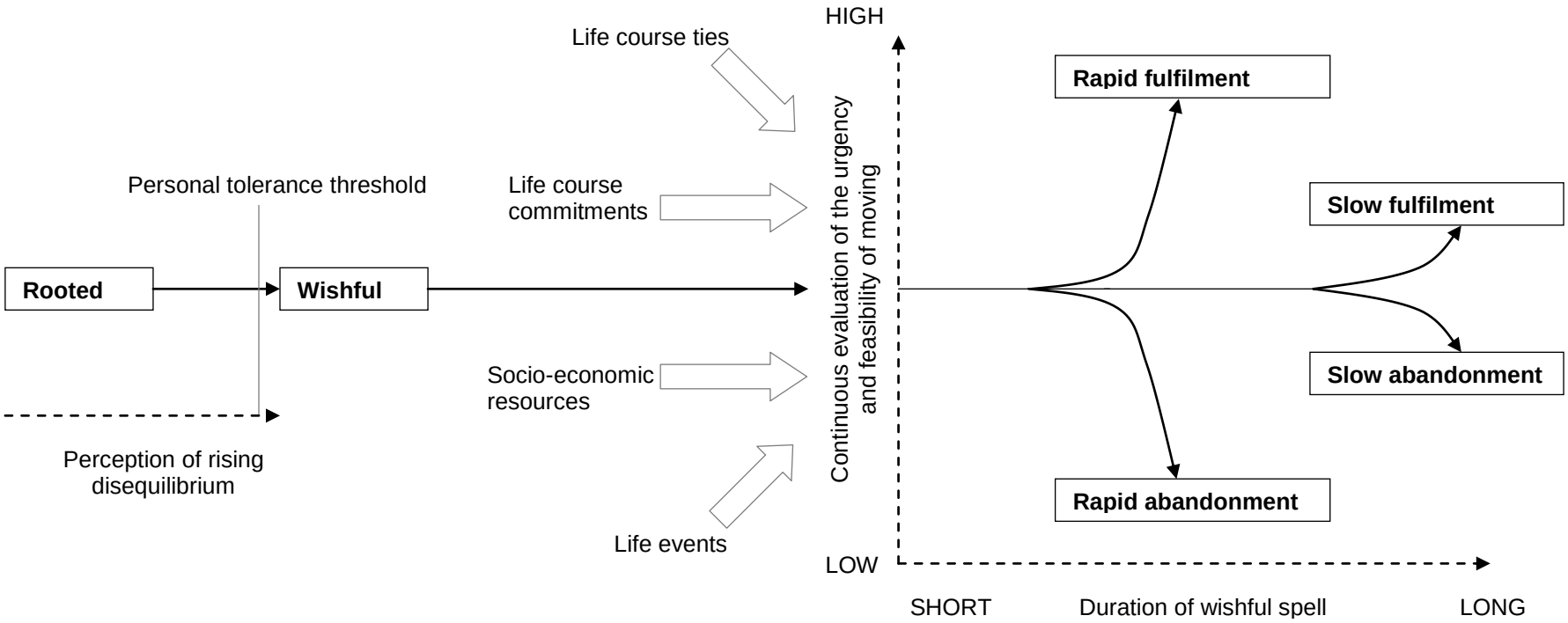
and the abandonment of moving desires, the study contributes to our understanding of how moving desires relate to actual (im)mobility behaviour over individual life course biographies.

7.2 Conceptual framework

A long tradition of behavioural research has sought to understand how individuals make moving decisions (Halfacree and Boyle, 1993). Within this literature, relocation decisions are typically conceptualised as passing through a series of decision-making phases (Kley, 2011). While many studies recognise that this decision-making process often takes a long time and may not result in an actual move (Brown and Moore, 1970; De Jong and Fawcett, 1981), few have explicitly theorised or analysed these aspects of mobility decisions. This results in a somewhat partial conceptualisation of individual agency (Halfacree and Boyle, 1993), hindering our understanding of how people make decisions to live in different places.

To address this research gap, Figure 7.1 presents a conceptual schema of the mobility decision-making process. The model focuses on volitional moves which are not directly triggered by life events, as 'forced' moves (for instance due to eviction or following union dissolution) may not be anticipated or desired and hence may follow a radically different decision-making pathway (chapter four). Step 1 of Figure 7.1 shows that the first stage of the decision-making process is often the emergence of a desire to move (Rossi, 1955). Whether or not a desire to move is expressed at a given moment therefore distinguishes rooted individuals who are immobile through choice, from those wishful thinkers who would prefer to live elsewhere. The emergence of a moving desire occurs in response to the disequilibrium generated when the needs, preferences and aspirations of household members are not being fulfilled in their current dwelling

Figure 7.1 A conceptual model of the emergence, duration and outcome of wishful spells



and neighbourhood (Rossi, 1955). Conceptually, life course theory indicates that rising disequilibrium can be driven by gradual changes in the life careers of household members (such as the gradual perception of a lack of space in the dwelling), as well as more sudden life events such as childbirth, completing school or changing jobs (Mulder and Hooimeijer, 1999; Rabe and Taylor, 2010).

In the classic view, perceiving disequilibrium generates 'housing stress', which is often articulated as dissatisfaction with dwelling and neighbourhood conditions (Brown and Moore, 1970; Speare *et al*., 1975). Given the considerable cognitive demands of moving decisions as well as the costs and disruption induced by relocating, Mulder (1996) argues that people do not continuously consider moving in response to dissatisfaction. Instead and as Figure 7.1 demonstrates, individuals exercise bounded rationality, only expressing a desire to move once housing stress and dissatisfaction have exceeded a person-specific threshold of tolerance (Lu, 1998; Mulder, 1996; Speare *et al*., 1975). Psychological theories term this transition from rooted to becoming a wishful thinker to be the predecisional phase of mobility decision-making (Kley, 2011). In this phase, the person is considering relocation but has not yet committed themselves to moving.

According to Kley (2011), expressing a moving desire indicates that an individual judges that they could be more satisfied in an alternative location. This fits well with the value-expectancy model of mobility decision-making (De Jong and Fawcett, 1981), which posits that people relocate as they expect moving to enable them to fulfil their life goals. Different types of goals are often considered to motivate different types of moves. In this framework, long distance moves are thought to be mainly driven by economic factors, while people typically move shorter distances for non-economic reasons (Niedomysl, 2011). As both types of moves are undertaken in response to disequilibrium, long and short distance moving decisions may however follow a similar process of deliberation.

Step 2 of Figure 7.1 shows that the duration and outcome of a wishful spell is then influenced by how feasible and urgent the individual perceives actually moving to be. In this framework, the urgency of moving refers to the

strength of the moving desire, as well as the immediacy with which moving is required. Figure 7.1 proposes that wishful individuals who perceive moving to be more urgent and more feasible are more likely to quickly fulfil their moving desires through residential mobility. Psychological theories indicate that this is because these individuals are more likely to perceive that they possess the necessary behavioural control to attain their more highly valued goals (Kley, 2011; Lu, 1998; Lu, 1999a). Wishful thinkers who perceive moving to be urgent and feasible are therefore likely to rapidly commit themselves more fully to moving by expressing firm intentions, plans or expectations of relocating (De Groot *et al*., 2011). Expressing a moving intention, plan or expectation indicates that an individual has entered the preactional phase of mobility decision-making, as they are actively striving to relocate (Kley, 2011). In Figure 7.1, this transition from the predecisional to preactional phase of decision-making occurs while evaluating the feasibility and urgency of moving.

As the feasibility and urgency of moving drops, the duration until fulfilment increases. This occurs because the individual has either less motivation to move or less control over their moving behaviour, increasing the length of the decision-making process. As the duration until fulfilment increases with decreasing feasibility and urgency, it also becomes more likely that a wishful spell will end in the abandonment of the moving desire. While the abandonment of desires is likely to take a considerable period of time if the individual perceives moving to be quite urgent and feasible, people are likely to more quickly abandon highly infeasible or non-urgent desires. Abandonment is likely to occur because individuals seek to avoid the uncomfortable cognitive dissonance generated by desiring to move while also perceiving that moving is impossible (Festinger *et al*., 1956). The abandonment of moving desires is likely to take place before wishful individuals enter the preactional phase of decision-making by expressing moving intentions or expectations, as abandoning these thoughts is often damaging for psychological well-being (Kley, 2011).

Figure 7.1 indicates that the feasibility and urgency of moving are influenced by a number of factors. Although these factors have well-documented effects on actual moving behaviour (Clark and Dieleman, 1996;

Rabe and Taylor, 2010), little is known about how they influence the duration of wishful spells or the likelihood of desire abandonment. In addition to the constraints imposed by the labour and housing markets (Mulder and Hooimeijer, 1999), Figure 7.1 shows that life course ties are hypothesised to affect the duration and outcome of wishful spells. Possessing ties such as a partner or children of school-age increases the complexity of making an initial decision to move and then choosing a new dwelling (Seavers, 1999), thereby increasing the duration of decision-making and the risk of desire abandonment. Disagreements between partners over whether moving is desirable are likely to constitute a particularly strong life course tie (chapter five). It can therefore be hypothesised that:

1) Higher levels of life course ties are associated with taking longer to fulfil a moving desire and a greater risk of this desire being abandoned

Secondly, the level of commitments a person possesses is likely to alter the feasibility of moving and hence their ability to quickly fulfil a moving desire. According to Feijten (2005), life course commitments can be thought of as states in the life careers of individuals from which it is difficult and costly to exit. Entering into committed states, such as getting married or buying a house, therefore restricts the future options of those entering into the commitment. Hence, desiring to move while possessing commitments is likely to be associated with a lengthier decision-making process and a greater risk of desire abandonment, as the decision to move and the choice of a new dwelling will be more complex and costly. This leads to the second hypothesis:

2) Higher levels of life course commitments are associated with taking longer to fulfil a moving desire and a greater risk of this desire being abandoned

An individual's access to resources is likely to configure both the feasibility and urgency of moving. On the one hand, higher levels of resources gained through employment and income should increase the geographical and tenure options available to households (Clark and Dieleman, 1996). However, the urgency of moving may be reduced for individuals with greater access to resources, as higher earners are likely to already live in more desirable places. In addition, access to resources is likely to increase the ability of individuals to

adjust their dwelling in situ without the need for a costly and disruptive move (Littlewood and Munro, 1997). Nevertheless, after controlling for subjective indicators of housing and neighbourhood quality, it can be hypothesised that:

3) Greater access to socio-economic resources is associated with being able to more quickly fulfil a moving desire and a lower risk of this desire being abandoned

Finally, life events such as household changes or unemployment are known to affect the trajectory of moving decisions (De Groot *et al*., 2011). Such events could make moving more urgent, for instance following the birth of a child. However, life events could also reduce the urgency or feasibility of moving and trigger the abandonment of a moving desire. As a result, it is hard to formulate a specific hypothesis regarding the influence of life events on the duration and outcome of wishful spells.

By testing the three hypotheses and investigating how life events affect the duration and outcome of wishful spells, this paper enhances our understanding of how restrictions and constraints can impede people from realising their housing preferences. Over time, remaining a wishful thinker or abandoning a moving desire could have negative effects on individuals' well-being and prosperity. Identifying who is unable to act upon their residential preferences is also important for our understanding of the social dynamics of neighbourhoods. This is because individuals who spend long periods of time desiring to leave particular neighbourhoods may retreat from investing or participating in their local area, potentially contributing to neighbourhood decline (van der Land and Doff, 2010).

7.3 Data and methods

This study draws upon eighteen waves of BHPS data covering the years 1991-2008. During the first sweep of the BHPS in 1991, approximately 10,300 individuals in 5,500 households completed detailed interviews (Taylor *et al*., 2010). These individuals have since been tracked and re-interviewed each

subsequent year. Extra households from Wales, Scotland and Northern Ireland were later added to the panel and have been tracked since 1999 (Wales and Scotland) and 2001 (Northern Ireland) (Taylor *et al*., 2010).

The BHPS is an ideal resource for this study, as information about each respondent's moving desires and actual moving behaviour is gathered at each interview. Whether or not an individual desired to move at each wave was identified from the answer given to the question '*If you could choose, would you stay here in your present home or would you prefer to move somewhere else*?' By guiding respondents to report their relocation preferences regardless of whether or not they feel able to actually relocate, this question gathers information on moving desires rather than more firm moving intentions, plans or expectations. Thus, this question enables us to identify people who want to move but who feel too constrained to intend or expect to do so. Although this is a valuable feature of the survey question, the lack of detailed information on the strength of moving desires does mean that there is likely to be considerable heterogeneity amongst wishful thinkers, who may have diverse reasons for desiring to move.

It was then necessary to identify spells where the person was a wishful thinker. Wishful spells could begin in one of two ways. Firstly, wishful spells could commence when a non-moving individual first expressed a desire to move after reporting no desire at the last wave. Secondly, wishful spells could begin when a person made a residential move and immediately desired to relocate again. In essence, becoming a wishful thinker required individuals to experience some kind of transition event. Once an individual became a wishful thinker, they were considered to be 'at risk' of their wishful spell terminating in one of two ways. Wishful spells could be terminated through a residential move (desire fulfilment), or through the abandonment of the moving desire. As wishful thinkers can be thought to be continuously at risk of experiencing either of these events, desire fulfilment and abandonment can be understood as 'competing risks' (Singer and Willett, 2003). Spells could also be terminated by either attrition or non-response if an individual's moving desires or their subsequent

moving behaviour were unknown at a given year. These spells were retained but treated as censored.

A particular advantage of the BHPS is its favourable rates of participant attrition (see Taylor *et al*., 2010), although Buck (2000a) notes that attrition correlates with mobility. Nevertheless, Rabe and Taylor (2010: 538) argue that there is little evidence for this attrition inducing selection biases in year-to-year analyses of moving behaviour. Although the focus on duration makes this study more vulnerable to selective attrition, the bias this could induce is dampened by including incomers to the BHPS after 1991 in the sample. In addition, informative censoring is partially controlled by including lagged predictors of attrition in the event history models. While attrition bedevils all panel surveys, prospective panel data gathered over a long time period are the only suitable source of data for this project. While retrospective surveys and population registers can provide longitudinal data with limited attrition, they cannot gather the requisite subjective data from individuals as they move through time.

By constructing variables counting the length of each spell for each person-year, it was possible to also analyse the duration of wishful spells. As information on moving desires was only gathered at each annual interview, all analyses were conducted within a discrete-time framework (see Singer and Willett, 2003). Continuous-time analysis would be rendered problematic by the large number of spells with a tied duration present in the sample (Singer and Willett, 2003). It is important to recognise that more than one spell per individual can be included in the analyses. This is because focusing on only one spell per individual is neither efficient nor consistent with the biographical approach advocated by life course theory.

7.4 Analysis

7.4.1 Desire emergence

Figure 7.1 indicates that the emergence of moving desires comprises the initial phase of mobility decision-making. To explore the factors associated with making this transition, it was necessary to focus on variations over time in whether individuals desired to move. This was achieved using a fixed effects logistic regression model with the expression of moving desires as the dependent variable (0=rooted, 1=wishful). Fixed effects models use only within-person variation on the dependent and independent variables, discarding all between-person variation using conditional maximum likelihood methods (Allison, 2009). This approach means that parameter estimates on the covariates can be interpreted as the effects of within-person *changes* in attributes on the likelihood of expressing moving desires (Allison, 2009: 33).

Unfortunately, adopting a fixed effects approach means that the effects of time-constant variables cannot be estimated, although they are implicitly controlled (Allison, 2009). This restriction may be advantageous for the analysis of mobility decision-making, as using each individual as their own control takes into account that time-constant unobservable factors (such as psychological characteristics) may affect relocation decisions. Given that the fixed effects model requires within-person variation on the dependent variable, all individuals who never changed from rooted to wishful were discarded. This left 135,116 person-years provided by 13,341 individuals (an average of 10.1 observations per person). Summary statistics for all variables included in the fixed effects model are presented in Table 7.1.

Table 7.1 Summary statistics for variables included in the fixed effects model (n=135,116 person-years)

Categorical variable	Frequency	%
Expression of moving desires		
no desire (rooted) (ref)	81,043	59.98
desire (wishful thinker)	54,073	40.02
Partnership and desire agreement		
single (ref)	45,603	33.75
couple, partner has no desire	50,481	37.36
couple, partner desires	31,166	23.07
couple, partner's desires missing	7,866	5.82
Employment status		
employed (ref)	85,854	63.54
unemployed	4,963	3.67
out of labour force	44,299	32.79
Housing tenure		
homeowner (ref)	99,726	73.81
social renter	22,913	16.96
private renter	12,477	9.23
Mobility *t-1* to *t*		
no move (ref)	117,902	87.26
move	17,214	12.74
Liking the neighbourhood		
likes (ref)	123,651	91.51
dislikes	11,465	8.49
Continuous variable	**Mean**	**Std. dev.**
Age	42.74	17.15
Number of dependent children	0.73	1.04
Log of real household income[1]	9.95	0.69
Roomstress (n people/n rooms)[2]	0.67	0.31

Source: BHPS, own calculations

[1]Household incomes have been deflated to 2005 prices and adjusted using the McClement's Before Housing Costs scale, to take into account the effects of household size and structure on income needs.

[2]Number of rooms excludes bathrooms, kitchens and sublet rooms.

Table 7.2 contains the results of a fixed effects logistic regression model analysing the expression of moving desires (reference rooted). Unsurprisingly, the results show that increases in age are associated with a reduced likelihood of desiring to move. Interestingly, partnership effects are stratified by whether the respondent's partner desires to move. A desire to move is much more likely to be expressed when an individual's partner also expresses a desire to move. This emphasises the importance of considering the agency of other 'linked' individuals in a person's household when analysing mobility decision-making and behaviour (chapter five).

Table 7.2 Fixed effects logistic regression model of wishful thinking (ref rooted)

Variable	Coefficient	Robust S. E.
Age	-0.085**	0.027
Age squared	-0.001***	0.000
Partnership and desire agreement (ref single)		
couple, partner has no desire	-1.110***	0.044
couple, partner desires	1.314***	0.044
couple, partner desires missing	-0.038	0.058
Number of dependent children	-0.207***	0.018
Labour force participation (ref employed)		
unemployed	-0.041	0.050
out of labour force	-0.231***	0.032
Log household income	0.033	0.017
Housing tenure (ref homeowner)		
social rent	0.287***	0.060
private rent	0.386***	0.056
Moved since last wave (ref no move)	-0.699***	0.033
social rent*move dummy	0.147**	0.067
private rent*move dummy	0.210***	0.062
Roomstress	0.711***	0.051
Dislikes neighbourhood (ref likes)	3.034***	0.053
N (n groups)	135116 (13341)	
Log-likelihood (improvement)	-43464.2 (12597.3)	
Wald chi^2 (d.f.)	11276 (31)	
AIC	86990.3	

Source: BHPS, own calculations
Note: Extra controls included for year of interview (not shown)
**p<0.05 ***p<0.001

Somewhat surprisingly, increasing numbers of children has a negative link to wishful thinking. This may be because roomstress is controlled and has a strong positive link to moving desires. Exiting the labour force is linked to a reduced likelihood of wishful thinking, while increasing income has the opposite effect (although this result is on the margins of statistical significance). This latter finding may indicate that people's housing and locational aspirations change with their socio-economic position, altering how they perceive and evaluate their current residential circumstances.

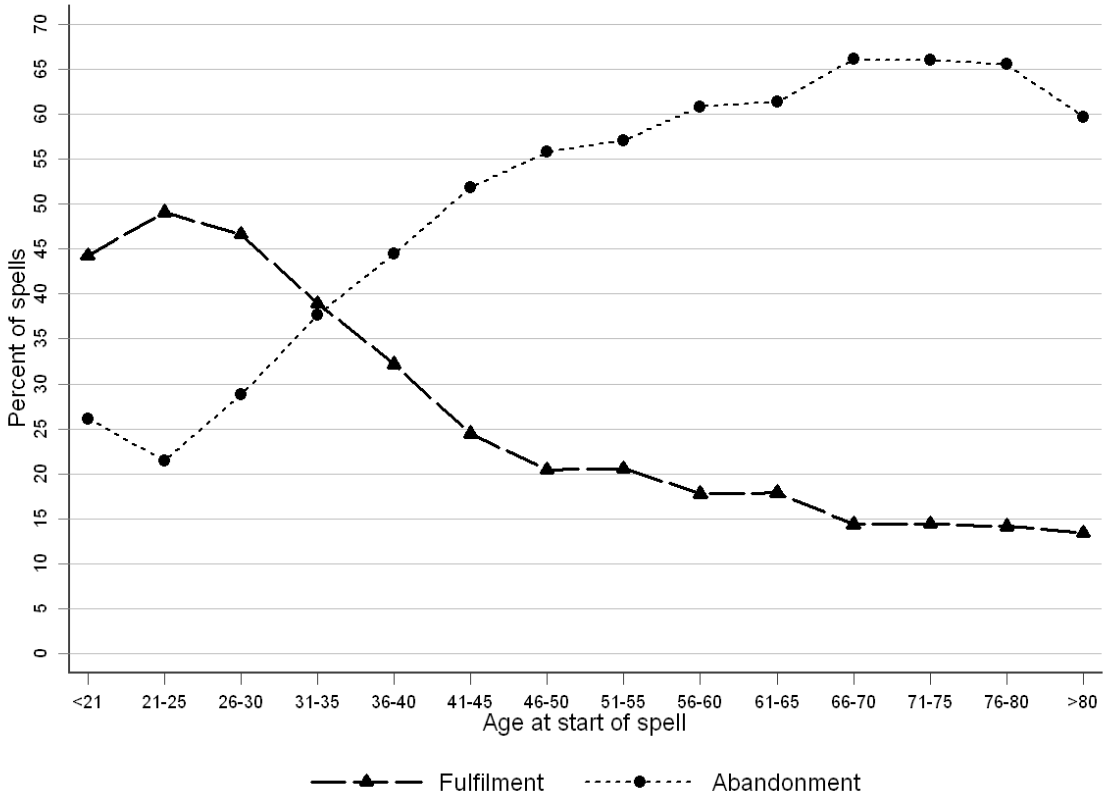
Housing tenure and recent residential mobility have strong links to the expression of moving desires. Individuals are more likely to express moving desires when living in social or particularly private rental housing when compared to periods spent in homeownership. As expected, residential mobility decreases the propensity for individuals to report desiring to move, although this

effect is dampened by moving into rental housing. These results suggest that moving desires are stimulated by living in rented accommodation, perhaps due to the strong norms of homeownership present in British society. The importance of perceived dissatisfaction for the expression of moving desires is confirmed by the strong positive coefficient on the 'dislikes neighbourhood' dummy. Overall and in keeping with classic behavioural models of mobility decision-making (Rossi, 1955; Speare *et al*., 1975), these results suggest that moving desires typically emerge in response to the housing disequilibrium generated by residential dissatisfaction, unmet space needs and changes in the life course careers of household members.

7.4.2 The duration and outcome of wishful spells

Previous research has shown that the percentage of people expressing a moving desire is substantially higher than the percentage of people who actually move in a given year (Buck, 2000a; chapter four). This suggests that either many people abandon their moving desires, or that it takes some people a considerable length of time to fulfil a desire to relocate. As a result, a key objective of this paper is to develop our understanding of the duration and outcome of wishful spells. This involves an analysis of step 2 of the mobility decision-making process outlined in Figure 7.1. As analysing the duration of wishful spells requires the spell to have an identifiable starting date, left-censored observations where this could not be ascertained were discarded. In practice, this necessitated the removal of all person-years where the individual had not changed state since their first interview. Person-years where the individual was not a wishful thinker were also removed.

Figure 7.2 The outcomes of wishful spells by age at the start of the spell



To investigate the extent to which individuals abandon their moving desires over the life course, Figure 7.2 plots the percentage of wishful spells initiated at different ages against the eventual outcome of the spell. Spells ending in censorship (c.20-30% in each age bracket) are omitted. The figure clearly shows that the probability of a wishful spell ending with either of the competing events changes dramatically over the life course. The percentage of spells ending in fulfilment peaks early in the life course, before dropping steadily with age. In contrast, the percentage of wishful spells ending in desire abandonment rises from a low of 21.9% of spells initiated in the early twenties to a high of over 65% in the late sixties and seventies. This pattern may indicate that the feasibility of moving varies systematically over the life course. For instance, it may be that the accumulation of ties and commitments with age constrains the feasibility of realising a moving desire to a greater extent than rising access to resources facilitates fulfilment.

Alternatively, it is also possible that the pattern visible in Figure 7.2 occurs because the urgency and motivations for desired moves change over the life course. While young people frequently make urgent moves to make significant changes in their household, education or labour force careers, older individuals may be more likely to desire to move for more discretionary reasons related to housing or neighbourhood dissatisfaction (Niedomysl, 2011). As the concept of housing careers suggests that many people accumulate wealth and select into more desirable dwellings and locations as they grow older, it seems possible that abandoning a moving desire also becomes less costly with age. Finally, older people may also be less reluctant to jettison a moving desire, as they have less time to recoup the benefits of relocation.

In order to link this analysis to an investigation of spell duration, Table 7.3 presents a life table of all 23,297 wishful spells initiated by BHPS respondents. The left hand column indicates the current length of each spell, while the second column documents how many spells reach this duration (Singer and Willett, 2003). The fulfilment, abandonment and censorship count columns indicate how many spells are terminated over the next year by each of the competing events. The event-specific hazard functions are derived by dividing the risk set (column 2) by the counts (columns 4 or 6) for each duration and event type. This assumes that censoring is non-informative, with censored cases not differing significantly from those experiencing the competing events. This could be problematic if those people who are least likely to fulfil their moving desires quickly abandon them (and vice versa), an issue which will subsequently be addressed using event history models.

Table 7.3 Life table describing the duration of wishful spells

Year of spell	*n* wishful at start of year	Time interval of event occurrence	Fulfilment *t* to *t+1*		Abandonment *t* to *t+1*		Censored *t* to *t+1*
			Count	Hazard function	Count	Hazard function	Count
1	23,297	[1,2)	5,008	0.2150	6,367	0.2733	2,737
2	9,185	[2,3)	1,553	0.1691	1,638	0.1783	1,328
3	4,666	[3,4)	665	0.1425	685	0.1468	647
4	2,669	[4,5)	338	0.1266	354	0.1326	371
5	1,606	[5,6)	191	0.1189	168	0.1046	215
6	1,032	[6,7)	113	0.1095	92	0.0891	115
7	712	[7,8)	56	0.0787	62	0.0871	105
8	489	[8,9)	32	0.0654	43	0.0879	73
9	341	[9,10)	31	0.0909	26	0.0762	46
10	238	[10,11)	13	0.0546	26	0.1092	30
11	169	[11,12)	6	0.0355	11	0.0651	32
12	120	[12,13)	4	0.0333	6	0.0500	19
13	91	[13,14)	1	0.0110	9	0.0989	22
14	59	[14,15)	4	0.0680	7	0.1186	13
15	35	[15,16)	1	0.0286	2	0.0571	13
16	19	[16,17)	0	-	1	0.0526	9
17	9	[17,18)	0	-	0	-	9

Source: BHPS, own calculations.

As duration rises, the risk of a spell ending through either fulfilment or abandonment drops rapidly. Although most spells are comparatively short, it is interesting to note that a sizeable minority of spells last longer than five years. This suggests that year-to-year longitudinal analyses may miss considerable heterogeneity within the pool of wishful thinkers, as some will have been desiring to move for much longer than others. In the first year after becoming a wishful thinker, the hazard rate of abandoning this desire is greater than the likelihood of it being fulfilled. This pattern largely persists as spell duration rises. These declining hazard rates seem to suggest that people become less likely to fulfil or abandon their desires the longer their spell lasts. As noted by Singer and Willett (2003), this may be caused by the unobserved heterogeneity of wishful thinkers. If those judging moving to be very urgent and feasible move quickly, while those with the opposite view quickly abandon their desires, as duration rises the pool of wishful thinkers becomes increasingly comprised of those unwilling to abandon but unable to fulfil their moving desires. This is in itself interesting, suggesting that a sizeable group of individuals are reluctant to abandon infeasible moving desires.

To analyse how different factors affect the duration and termination of wishful spells and thus test the hypotheses, it is necessary to use event history models (Singer and Willett, 2003). The dependent variable is a three category nominal variable recording whether a wishful spell was on-going, terminated by fulfilment, or terminated by abandonment at each person-year (the reference category is on-going). This dependent variable measures whether the termination event occurred between waves *t* and *t+1*, while the independent variables in the models contain wave *t* lagged values (Table 7.4 for summary statistics). A series of spell duration dummies are included in the models to capture the baseline hazard function (Singer and Willett, 2003). As the dependent variable is nominal, a multinomial logistic regression model

Table 7.4 Summary statistics for variables included in the multinomial model (n=40,234 person-years)

Categorical variables	**N**	**%**
Number of fulfilment events	7,367	18.31
Number of abandonment events	8,958	22.26
Female (ref male)	21,316	52.98
Ethnic minority (ref white)	1,374	3.42
Partnership status and moving desire agreement (ref single)		
couple, partner disagrees	7,932	19.71
couple, partner agrees	16,232	40.34
couple, partner's desires are unknown	2,253	5.60
Change in partnership status *t* to *t+1* (ref no change)		
change	2,120	5.27
unknown	3,048	7.58
Presence and ages of dependent children (ref none)		
all children < 5 years old	3,905	9.71
children aged 5 or over in household	11,848	29.45
Child born to respondent *t* to *t+1* (ref no birth)		
child birth	1,584	3.94
unknown	3,430	8.53
Education level (ref no qualifications)		
low (basic secondary school qualifications-eg. GCSE)	10,395	25.84
medium (advanced school/vocational qualifications-eg. A Level)	16,491	40.99
high (university degree and above)	5,914	14.70
other or unknown	363	0.90
Employment status (ref employed)		
unemployed	1,882	4.68
out of the labour force	11,350	28.21
Housing type (ref single family building)		
flat	7,062	17.55
other	835	2.08
Housing tenure (ref homeowner)		
social renter	7,642	18.99
private renter	5,585	13.88
Dislikes neighbourhood (ref likes)	7,378	18.34
Uncooperative with interviewer (ref cooperative)	655	1.63
Failed to provide complete tracking information (ref provided)	868	2.16
Geographical region (ref rest of England)		
London and SE England	8,500	21.13
Wales	4,612	11.46
Scotland	5,529	13.74
N. Ireland	1,923	4.78
Continuous variables	**Mean**	**S.D.**
Age	40.20	16.10
Log of real household income[1]	9.95	0.70
Roomstress (n people/n rooms)[2]	0.70	0.33

Source: BHPS, own calculations

[1]Household incomes have been deflated to 2005 prices and adjusted using the McClement's Before Housing Costs scale, to take into account the effects of household size and structure on income needs.

[2]Number of rooms excludes bathrooms, kitchens and sublet rooms.

was used to estimate the likelihood of spells being terminated by fulfilment and abandonment (Box-Steffensmeier and Jones, 2004). This allows fulfilment and abandonment to be treated as risks which continuously 'compete' to terminate wishful spells. As individuals could be observed in multiple separate spells which cannot be assumed to be independent, standard errors have been corrected for the clustering of person-year observations within individuals.

This modelling strategy requires a number of assumptions. Firstly, the use of the multinomial framework requires accepting the Independence of Irrelevant Alternatives assumption. This states that "conditional on the covariates, the ratio of the probabilities of any two alternatives is independent of each of the other alternatives" (Box-Steffensmeier and Jones, 2004: 178). This does not seem to be unrealistic for this analysis, as moving and abandoning are dissimilar alternatives which individuals can probably evaluate independently (Long and Freese, 2006: 243-244). A second, more general assumption of the modelling framework is that censoring is non-informative (Singer and Willett, 2003). This could be problematic if there is selective attrition from the BHPS sample. As this assumption is *conditional on the covariates* (Singer and Willett, 2003: 591), care was taken to ensure that lagged independent variables were included to control for most of the predictors of BHPS attrition and non-response identified by Uhrig (2008). This included variables for housing type and two interviewer reported measures of participant engagement (Table 7.4 for details).

Consistent with Table 7.3, Model 1 in Table 7.5 indicates that the baseline hazard functions of both desire fulfilment and abandonment decrease with spell duration. This decline persists even when independent variables are added in Model 2, although the shape of the hazard functions change somewhat. The baseline risk of fulfilment becomes more strongly negative with the inclusion of independent variables, while the risk of abandonment changes less dramatically. Overall, these strong and highly significant effects of duration are important and indicate that examining whether a moving desire expressed at point *t* is realised by *t+1* misses considerable heterogeneity amongst wishful thinkers.

Table 7.5 Multinomial logistic discrete-time event history model of desire fulfilment and abandonment (ref on-going)

Variables[1]	Model 1				Model 2			
	Fulfilment		Abandonment		Fulfilment		Abandonment	
	Coeff.	Robust SE	Coeff.	Robust SE	Coeff.	Robust SE	Coeff.	Robust SE
Duration of wishful spell (years)								
1	-0.886***	0.020	-0.611***	0.017	-2.099***	0.309	-0.915***	0.258
2	-1.247***	0.031	-1.180***	0.030	-2.461***	0.310	-1.548***	0.260
3	-1.505***	0.045	-1.462***	0.044	-2.715***	0.313	-1.868***	0.263
4	-1.666***	0.062	-1.588***	0.059	-2.816***	0.316	-2.000***	0.266
5	-1.734***	0.079	-1.872***	0.084	-2.903***	0.323	-2.286***	0.273
6	-1.877***	0.102	-2.120***	0.113	-3.012***	0.329	-2.574***	0.283
7	-2.253***	0.143	-2.148***	0.136	-3.356***	0.342	-2.584***	0.291
8	-2.438***	0.187	-2.111***	0.161	-3.469***	0.359	-2.564***	0.309
9	-2.142***	0.196	-2.251***	0.206	-3.143***	0.369	-2.792***	0.330
10	-2.577***	0.288	-1.884***	0.211	-3.444***	0.427	-2.372***	0.338
11	-3.068***	0.418	-2.462***	0.314	-3.904***	0.531	-2.961***	0.414
12	-3.401***	0.587	-2.708***	0.422	-4.364***	0.686	-3.220***	0.501
13	-4.078***	1.008	-1.880***	0.358	-5.078***	1.084	-2.330***	0.439
14	-2.169***	0.528	-1.609***	0.414	-3.092***	0.602	-2.154***	0.504
15	-2.944**	1.026	-2.944**	1.026	-3.781***	1.056	-3.540**	1.095
Age					-0.019***	0.001	0.016***	0.001
Female (ref male)					-0.026	0.032	-0.041	0.028
Ethnic (ref white)					-0.378***	0.089	0.098	0.080
Partnership status and desire agreement (ref single)								
couple, partner disagrees					-0.749***	0.055	0.090**	0.039
couple, partner agrees					0.155***	0.039	-0.325***	0.037
couple, partner's desires missing					-0.214**	0.079	-0.129**	0.061
Change in partnership status *t* to *t+1* (ref no change)[2]					1.917***	0.064	0.260***	0.077
Presence and ages of dependent children (ref none)								
all children<5					0.043	0.052	-0.004	0.055
children>=5 present					-0.290***	0.041	0.119**	0.037
Child birth *t* to *t+1* (ref no birth)[2]					0.383***	0.065	-0.125	0.079
Education level (ref very low/none)								
low					0.114	0.059	-0.032	0.043

medium		0.223***	0.057	-0.087**	0.043
high		0.456***	0.066	-0.223***	0.056
other/unknown		0.032	0.176	0.004	0.141
Employment status (ref employed)					
unemployed		0.054	0.073	-0.194**	0.075
out of labour force		0.337***	0.042	0.132***	0.036
Log household income		0.121***	0.028	0.020	0.023
Housing tenure (ref homeowner)					
social renter		-0.076	0.046	-0.000	0.041
private renter		1.209***	0.045	-0.139**	0.051
Roomstress		0.364***	0.057	0.019	0.059
Dislikes neighbourhood (ref likes)		0.221***	0.039	-0.856***	0.044
Geographical region (ref Rest of England)					
London and SE		-0.191***	0.042	-0.097**	0.038
Wales		-0.281***	0.056	0.070	0.043
Scotland		-0.200***	0.051	0.067	0.044
N. Ireland		-0.304***	0.081	0.278***	0.063
N (clusters)	40234 (12557)	40234 (12557)			
Log pseudolikelihood (improvement over null)	-37487.557 (6714.01)	-31966.452 (12235.115)			
Wald chi^2 (d.f.)	11359.52 (30)	12457.02 (122)			
McFadden's pseudo r^2	0.152	0.277			
AIC	75035.115	64176.903			

Source: BHPS, own calculations

** $p<0.05$, *** $p<0.001$

[1] Note that extra controls are included for respondent cooperation, housing type and year of interview (not shown)

[2] These variables contain categories for unknown values (not shown)

As hypothesised, many of the independent variables have opposite effects on the risk of experiencing each of the competing events. As age rises, the risk of fulfilment drops while the risk of abandonment increases. As these effects remain significant after controlling for life course characteristics and access to resources, this result suggests that increasing age may reduce the urgency of moving. This could be because many older individuals have already selected themselves into more desirable dwellings and locations, reducing the perceived costs of desire abandonment. Consistent with prior research and the first hypothesis (Ferreira and Taylor, 2009), whether the respondent is partnered and the moving desires of any partner have a strong impact on the risks of fulfilment and abandonment. Compared with wishful singles, individuals with a partner who agrees that moving is desirable have a greater risk of fulfilment and a lower risk of abandonment. The opposite is true for individuals whose partner does not wish to move, probably because the feasibility of moving is reduced when partners disagree.

In support of hypothesis one, school-age children seem to constitute a life course tie which lowers the risk of fulfilment and increases the risk of abandonment. As education level rises, the risk of desire fulfilment rises and the risk of abandonment drops. This provides some support for hypothesis three, as higher levels of education are typically linked to greater access to socio-economic and cultural resources. Given that many students migrate to attend university in the UK, this finding may also indicate that prior experience of mobility increases the perceived feasibility of making subsequent moves.

Housing tenure has close links to the duration and outcome of wishful spells, with private renters far more likely to realise a desire to move than homeowners. This is probably a compositional and contextual effect, as mobile people select into private rental housing due to the ease of making future moves within this sector. As anticipated, disliking the neighbourhood increases the risk of desire fulfilment while greatly decreasing the risk of desire abandonment. This is probably because disliking the neighbourhood increases the urgency of relocating. People who dislike their neighbourhood are therefore not only more likely to desire to move (Table 7.2), they are also far more likely

to subsequently act upon this desire (Table 7.5). This finding indicates that policies aiming to promote community stability need to focus upon investing in neighbourhoods.

Given that desire fulfilment and abandonment can be considered to be competing risks, those independent variables which do not have opposite effects on these events are of particular interest. Intriguingly, ethnic minorities have a lower risk of fulfilment than whites, but no significantly different risk of abandonment. While we must be cautious in interpreting this effect given the small sample size, this result may suggest that ethnic minorities face additional barriers to making desired moves above and beyond those imposed by socio-economic resources. Alternatively, it is possible that ethnic minorities may be more likely to express preferences for less feasible international moves, perhaps for family or cultural reasons. In contrast, partnership changes seem to increase the risk of both abandonment and particularly fulfilment. These findings indicate that partnership changes catalyse mobility decision-making, either by stimulating residential adjustments or by triggering desire abandonment.

Employment status has interesting links to the duration and outcome of wishful spells. While being out of the labour force is associated with a greater risk of fulfilment and abandonment than being employed, unemployment reduces the risk of abandonment but has no significant link to fulfilment. This implies that the unemployed are reluctant to jettison their moving desires, perhaps because they perceive moving to be more urgent than the employed. While increasing income stimulates the expression of moving desires (Table 7.2), high levels of income also facilitate fulfilment (Table 7.5). In contrast, there is no evidence that people with lower incomes are significantly more likely to abandon their moving desires. This provides only partial support for hypothesis three, indicating that socio-economic constraints on the feasibility of moving may be an important factor in the production of socio-economically stratified neighbourhoods.

Interestingly, high levels of roomstress promote fulfilment but have no significant links to the abandonment of moving desires. The regional variables indicate that people living in England outside of London and the South-East are

most likely to fulfil their moving desires. Wishful thinkers in London and the South-East are less likely to fulfil and abandon their moving desires, highlighting the difficulties faced by people seeking to move within these historically tight housing markets. Overall, the results provide broad support for the first two hypotheses. The models indicate that high levels of life course ties and commitments increase the length of time until a moving desire is fulfilled, while simultaneously increasing the risk of desire abandonment. There is somewhat more mixed support for hypothesis three, as employment status and income have more complex associations with desire fulfilment and abandonment.

7.5 Conclusions

To better understand the importance of spatial mobility over the life course, it is necessary to also investigate why people do not relocate (Cooke, 2011; Hanson, 2005). Residential immobility is an important process for many individuals, as spells of residential rootedness carry considerable cultural and emotional meaning (Mason, 2004). As psychological theories of mobility decision-making suggest that people seek to live in places which satisfy their life goals (De Jong and Fawcett, 1981; Lu, 1998), it is valuable to analyse how moving desires relate to subsequent moving behaviour. Most existing research in this area has used short segments of longitudinal data to assess who quickly fulfils their moving desires (chapter four; Landale and Guest, 1985). These studies show that many people with a desire to move have not fulfilled this desire one or two years later. This weak relationship could exist because it takes people a long time to fulfil their moving desires, or because many people abandon their desires to prevent experiencing cognitive dissonance.

Analysing the emergence, duration and abandonment of wishful spells extends our knowledge of the extent to which residential immobility can be a choice or the outcome of a lack of choice. It is important to identify those individuals who are unable to act upon their moving desires, as this could have negative consequences for their subjective well-being and prosperity (Ferreira

and Taylor, 2009). The implications of frustrated moving desires may also be felt at a wider scale, as the labour and housing markets require people to be able to match themselves to appropriate employment and housing vacancies (Wheaton, 1990).

To extend our understanding of wishful thinking and the abandonment of moving desires, the analyses first investigated the emergence of moving desires. The results reinforce the view that people express moving desires when their current dwelling no longer meets their needs and preferences (Rossi, 1955), as moving desires emerge when people experience space pressure in their current dwelling, start to dislike their neighbourhood or when their partner desires to move. The analysis then focused on the duration and outcome of wishful spells. In keeping with the theoretical model outlined in Figure 7.1, the analyses indicated that the feasibility and urgency of moving conditions the trajectory of wishful spells. Importantly, Figure 7.2 shows that the propensity to fulfil moving desires drops sharply with age, while the likelihood of abandoning a moving desire rises. This suggests that the familiar pattern of declining mobility rates with age does not occur simply because older people are less likely to want to move, but also because their moving desires are less urgent and/or feasible and are hence less likely to be fulfilled.

As Figure 7.1 demonstrates that changes in the feasibility and urgency of making a desired move could be driven by changing levels of ties, commitments and socio-economic resources over the life course, event history models were used to analyse the duration and outcome of wishful spells. The results support the hypotheses that people with greater levels of life course ties and commitments have a lower risk of fulfilling their moving desires and a higher risk of rapidly abandoning them. Given the strong effects of the global financial crisis on the British housing market, the constraining effects of homeownership commitments are likely to have become more acute since the end of the study period. Indeed, Rabe (2012) has shown that since 2009, it has been difficult for homeowners to immediately act upon their moving desires. This could suggest that both desired and undesired stability within the homeownership sector may increase in the near future, as mobile younger households find it difficult to

access homeownership while existing homeowners find it harder to realise their moving desires.

Ethnicity, socio-economic status and life events appear to have more equivocal links to the duration and outcomes of wishful spells. Ethnic minorities and those with lower incomes are less likely to fulfil their moving desires than whites and those with a higher income, while having no significantly different propensity to abandon their desires. This suggests that these groups have a tendency to be persistently disadvantaged long-term wishful thinkers. This could have negative effects on their well-being, as these groups are disproportionately likely to live in the most deprived areas where levels of neighbourhood satisfaction are often lower (Rabe and Taylor, 2010). This could in turn reduce social cohesion in these areas, as qualitative evidence suggests that wishing to leave a neighbourhood leads people to avoid participating or investing in their local area (van der Land and Doff, 2010). These findings suggest that over time, undesired immobility may contribute significantly to the production of socio-economically disadvantaged neighbourhoods. Overall, investigating why people do not move *even though they may want to* remains essential if we are to better understand the causes and consequences of residential (im)mobility over the life course.

Chapter 8

Conclusions and discussion

The previous four chapters have documented the empirical work conducted to address the overall objective of this thesis (as introduced in the first chapter). By answering the research questions formulated in chapter two, chapters four to seven combine to develop our understanding of how the life course context affects the expression and realisation of moving desires. In this final chapter, the insights gained from the four empirical studies are synthesised to provide a series of broad conclusions to the thesis. The wider significance of this research for the expansion of geographical knowledge is also discussed in detail.

The chapter commences by revisiting the central objective of the thesis. The four studies conducted to fulfil this objective are then briefly summarised in turn. This summary is subsequently used to derive some broad conclusions which can only be gained by considering these papers to be the component parts of a single study. The chapter then reflects upon the constraints faced when conducting this project, discussing both how these have been mitigated and how they might be more comprehensively addressed by future studies. Finally, the chapter concludes by outlining several pertinent avenues for further research into residential mobility decision-making and behaviour.

8.1 Motivations and objective

It is often argued that there has been a thematic and epistemic shift in the study of mobility since the mid-1990s, as the cultural and mobilities turns have motivated scholars to use both established and novel methods to analyse new topics such as virtual mobility, transnationalism and migrant identities (King, 2012). This shift has greatly enriched how mobility is conceptualised to be a variety of relational and emotional processes which contribute to the social

construction of identities (Gutting, 1996; Mason, 2004; Winstanley *et al.*, 2002). Nonetheless, it remains important to also conduct broader scale quantitative research into residential mobility if we are to better understand how people shape and are shaped by the contexts in which they live (Findlay and Li, 1999). Such research provides a number of important benefits. Firstly, quantitative analyses of residential mobility decision-making and behaviour can provide generalisable insights about how the life course context conditions whether people are able to use mobility to maintain and enhance their prosperity and well-being (De Jong and Fawcett, 1981). In addition, detailed knowledge of residential (im)mobility behaviour helps us to understand how the population composition of places changes over time, thereby facilitating planning and resource allocation decisions (Dennett and Stillwell, 2010). A comprehensive understanding of mobility processes is also necessary to understand the structuration of housing and labour markets.

While many studies use aggregate cross-sectional data to analyse mobility behaviour (Dennett and Stillwell, 2010; Finney, 2011; Plane *et al.*, 2005; Plane and Jurjevich, 2009), this thesis has argued that adopting a micro-scale longitudinal perspective contributes important new insights. Fundamentally, this approach enables (im)mobility to be conceptualised not as a discrete event, but as a contextualised process which unfolds over time (Kley and Mulder, 2010). Disaggregate longitudinal analysis also facilitates the study of the temporal ordering of events within the life course. This enables us to address questions which have puzzled migration scholars for decades, such as 'what triggers relocation?' or 'who benefits most from migration?' Finally, a longitudinal perspective is also more consistent with the biographical approach advocated by social and life course theories (Dykstra and van Wissen, 1999; Findlay and Li, 1997).

As discussed in chapter three, prospectively gathered panel data provide a particularly apt means to analyse residential (im)mobility as a temporal process. This is because panel surveys can gather data about people's thoughts about moving, which can then be linked to their subsequent moving behaviour (Rossi, 1955). This technique enables those individuals who are

homogenised into the categories of ‘mover’ or ‘stayer’ in cross-sectional research to be disaggregated according to whether or not their moving behaviour is consistent with their previously expressed thoughts about moving. This enables the identification of factors which either enable or inhibit people from acting upon a desire (not) to relocate.

While a number of recent studies have linked moving intentions or expectations to subsequent mobility behaviour (De Groot *et al.*, 2011; Kan, 1999; Lu, 1999a), the realisation of moving desires has received much less attention. This is somewhat surprising, as analysing whether people act upon their moving desires provides a unique way to assess whether people are able to use (im)mobility as a strategy to fulfil their life goals (De Jong and Fawcett, 1981). By enabling the separation of attitude-consistent and attitude-discrepant moving behaviours (Desbarats, 1983a), linking moving desires to subsequent mobility permits us to analyse whether people are (im)mobile through choice, or because they are unable to act upon their underlying preferences and aspirations.

As a result, this thesis has sought *to gain insight into how the life course context affects both the expression of moving desires and the links between moving desires and subsequent moving behaviour*. To meet this broad objective, chapter two proposed four sets of specific research questions to be answered in turn in four empirical papers (chapters four to seven). Each set of questions and hence each paper was motivated by a specific gap in our knowledge of how moving desires are linked to subsequent moving behaviour. These four studies will now be summarised in turn.

8.2 Fulfilling the objective: Empirical summary

8.2.1 Analysing the relations between moving desires, expectations and actual moving behaviour

The first set of research questions crystallised in response to two observations about existing studies of mobility decision-making. Firstly, much of the literature uses terms like moving desire, intention, plan or expectation imprecisely and interchangeably (Kley, 2011), even though these have long been recognised to be distinct cognitive concepts (Rossi, 1955). Secondly, few studies have attempted to thoroughly investigate whether these thoughts are expressed together in distinct combinations (c.f. Kley, 2011; Sell and De Jong, 1983). To address these issues and hence test the conceptual framework outlined in Figure 2.7, the first set of research questions asked:

1) What factors influence the combination of moving desires and expectations a person expresses?
2) How do these combinations of pre-move thoughts affect subsequent moving behaviour?

These questions were answered in chapter four. The results showed that moving desires and expectations are different cognitive constructs influenced by specific sets of factors. For example, after controlling for housing satisfaction and (dis)liking the neighbourhood, housing tenure is more closely associated with moving expectations than moving desires. The results also demonstrated that moving desires and expectations are expressed in distinct combinations. Thus, perceived deficiencies in dwelling or neighbourhood conditions are only strongly linked to moving expectations when the expected move is also desired.

Importantly, the analyses demonstrated the salience of distinguishing desire-expectation combinations when modelling subsequent moving behaviour. The likelihood of a person realising their moving desires is strongly contingent upon whether or not they also expect to move, with expecting to move greatly increasing the likelihood of a moving desire being fulfilled. By

highlighting that the likelihood of realising a moving desire is strongly influenced by whether or not a person perceives actually moving to be possible, this paper helps to fulfil the overall research objective. As posited in chapter two, this study also showed that mobility decision-making can follow a number of different pathways in response to different triggers and motivations.

8.2.2 Investigating the linked lives of partners

The second set of research questions were formulated to more closely link the analysis of mobility decision-making to life course theories. While life course theories contend that people's lives are constructed relationally through their interactions with others (Bailey, 2009), few studies of mobility decision-making have analysed the intra-household dynamics of moving decisions (Sell and De Jong, 1978). This is particularly problematic for our understanding of how couples make residential mobility decisions, as a large family migration literature has shown that both partners typically influence the long distance migration of couples (Cooke, 2008a). Hence, the second set of research questions asked:

3) Which couples are most likely to disagree about whether moving is desirable?
4) How do these partner disagreements affect the subsequent moving behaviour of couples?

Chapter five sought answers to these questions. Descriptive analysis demonstrated that disagreements over whether moving is desirable are quite common. Given that the previous chapter (also Landale and Guest, 1985; Speare *et al*., 1975) found moving desires to be strongly associated with dwelling and neighbourhood dissatisfaction, it is unsurprising that disagreements over whether moving is desirable seem to be most common when partners also disagree about the quality of their dwelling or neighbourhood conditions.

The most striking findings from this chapter were how strongly the residential mobility behaviour of couples is affected by whether the partners previously (dis)agreed about the desirability of moving. Individuals are far more likely to realise a desire to move if this desire is shared with their partner than if their partner does not wish to move. Partnership therefore has nuanced links to residential mobility, as partners can both constrain or facilitate desired residential moves. These findings validate the concept of linked lives (Bailey *et al.*, 2004), highlighting that the agency of multiple individuals intersects at the household scale to affect processes of mobility decision-making.

8.2.3 Exploring the biographical dimension of mobility decision-making

The third set of research questions were motivated by the observation that many longitudinal studies only analyse snapshots of individual lives, linking a person's moving desires at time *t* to their actual moving behaviour at *t+1* (Ferreira and Taylor, 2009; Landale and Guest, 1985; Rossi, 1955). While valuable, this approach can tell us little about how moving desires relate to actual moving behaviour over longer periods of the life course. This is problematic, as structuration and life course theories emphasise that mobility decision-making is conditioned by the long-term biographical context within which it occurs (Dykstra and van Wissen, 1999; Halfacree and Boyle, 1993). To better understand the long-term relations between moving desires and subsequent moving behaviour, the third set of research questions asked:

5) How are moving desires and actual moving behaviour sequenced over individuals' long-term life course biographies?
6) How are these mobility biographies influenced by the long-term trajectories of other life course careers?

Answers to these questions were provided in chapter six. By constructing and visualising seventeen-year mobility biographies, this chapter demonstrated that short-term relationships between moving desires and actual moving behaviour

can have diverse interpretations depending upon the longer-term context within which they are situated. For instance, the results showed that while some people quickly fulfil their moving desires, others spend long periods of time as a wishful thinker before making a residential move. Uncovering this heterogeneity required a longer-term approach than has previously been attempted.

Modelling the type of mobility biography a person experiences revealed that the long-term trends in a person's household and employment careers have close links to their residential (im)mobility biography. Importantly, the results highlighted that many people experience surprisingly long periods of immobility across their life courses. Long periods of undesired immobility were found to be particularly common for disadvantaged groups, such as individuals with persistently low household incomes.

8.2.4 Analysing desire abandonment and the duration of wishful thinking

Building upon the arguments advanced in chapter six, a final research question was posed in response to two important gaps in our understanding of how moving desires relate to subsequent moving behaviour. Firstly, few studies have analysed how long it takes people to realise their moving desires, even though many authors have noted that mobility decision-making is often a complex and time-consuming process (Kan, 1999). In addition, researchers have often neglected to consider that people can also exercise their agency by abandoning their moving desires. This may be because their needs and preferences and/or their housing supply have been adjusted *in situ* (Brown and Moore, 1970; Deane, 1990). Alternatively, abandoning a moving desire may occur when a moving desire is perceived to be unattainable, as harbouring a persistently frustrated desire to relocate could produce cognitive dissonance (Festinger *et al.*, 1956). These observations prompted a final research question:

7) What factors influence the length of time it takes an individual to either fulfil or abandon a moving desire?

This question was answered in chapter seven. This chapter hypothesised that life course ties and commitments, socio-economic resources and life events all interact to condition how long it takes people to either fulfil or abandon their moving desires. These hypotheses were generally supported by the results. High levels of life course ties (such as school-aged children) and commitments (for instance homeownership) seem to impede the fulfilment of moving desires. This suggests that the low mobility rates of families living in owner-occupied housing is not solely a selection effect (Helderman, 2007; Long, 1972), as school-age children and homeownership appear to also frustrate the realisation of moving desires. The findings also suggest that ethnic minorities, the poor and social renters are disproportionately more likely to spend longer periods of time desiring to move.

Chapter seven also enhanced our understanding of the relationships between age and mobility behaviour. While it is well-known that mobility rates decline as age increases (Long, 1992), chapter seven demonstrates that this should not simply be interpreted as evidence that people become less inclined to move as they age. This is because older people seem to also be more likely to abandon their moving desires than younger individuals. This could suggest that moving becomes less feasible with age, but it may also imply that older people consider acting upon their moving desires to be less urgent.

8.3 Broader insights and implications

By developing our understanding of the links between moving desires and subsequent moving behaviour, the four studies discussed above combine to contribute to the expansion of geographical knowledge. Insights gained from this thesis make a theoretical and methodological contribution to residential mobility research and population geography more generally. In addition, the study also has relevance for policymakers. Each of these contributions will now be discussed in turn.

8.3.1 Theoretical developments

This thesis extends behavioural theories of mobility decision-making in a number of ways. Firstly, the study moves beyond existing theories by conceptualising mobility decision-making as a fundamentally heterogeneous process. By testing the conceptual model outlined in Figure 2.7, chapter four demonstrated that people can follow multiple decision-making pathways when deliberating residential moves. In addition, chapter seven explicitly theorised and analysed the reversibility of residential (im)mobility decisions. Chapters six and seven also revealed that considerable heterogeneity exists in the temporal dimension of mobility decision-making.

This complexity of mobility decision-making has been poorly conceptualised by traditional theories. Many of the classic studies focused upon elaborating a single cognitive pathway by which people make relocation decisions, while simultaneously acknowledging that their model was not universally applicable (for instance Brown and Moore, 1970; Rossi, 1955; Speare *et al*., 1975). Given that life course theories and the empirical mobility literature reaffirm that people make different types of move for different reasons from within different contexts (Clark, 2008; Mulder and Hooimeijer, 1999), attempting to conceptualise all moving decisions as having the same latent, linear structure seems highly problematic. By proposing and testing a behavioural schema which shows that people make moving decisions in a wide range of ways (Figure 2.7), this study contributes to the construction of a theoretical framework which can better conceptualise the heterogeneity of residential (im)mobility decisions.

This thesis also enhances our understanding of the relationality of mobility decision-making, by demonstrating the importance of contextualising the links between moving desires and subsequent moving behaviour. While relationality is a fundamental tenet of life course theories (Bailey, 2009), how this relationality actually operates on the ground is poorly understood. This thesis shows that two dimensions of relationality are important for understanding how people make moving decisions. Firstly, mobility decision-

making should be conceptualised as relational *within* individuals over time, as past experiences can condition and affect a person's subsequent behaviours. Chapters six and seven emphasise the importance of following people over long periods of time to situate the analysis of mobility decision-making and behaviour within a long-term mobility biography (Halfacree and Boyle, 1993). By positing that a person's decision-making history needs to be considered in conjunction with their actual mobility biography, these chapters move beyond the focus on actual moves which characterised traditional mover-stayer and cumulative inertia models of mobility biographies (Belot and Ermisch, 2009). More broadly, analysing the biographical context of decision-making also helps to emphasise that the timing and order of events conditions how people experience (im)mobility (Feijten, 2005).

Importantly, this thesis has also demonstrated that mobility decision-making is conditioned by the relational interactions *between* individuals (Bailey, 2009). The results clearly show that whether or not a person's partner desires to move exerts a very strong influence on whether and when a person fulfils their moving desire (chapters five and seven). This finding demonstrates the value of conceptualising and analysing households as collections of 'linked lives', as the thoughts and behaviour of individuals is strongly affected by the agency of those they live with (Bailey *et al.*, 2004; Dykstra and van Wissen, 1999). This implies that the influence of household attributes on mobility decision-making should, where possible, be modelled using relational and attitudinal variables rather than covariates capturing static attributes (for instance marital status and the presence of children). Such variables enable us to analyse how the household context can either facilitate or constrain the (im)mobility of individuals, depending upon the interactions between household members (Figure 2.7). While it has become increasingly common for social scientists to argue that the broad geography of families influences mobility behaviour (Mulder, 2007; Smith, 2011), this study has shown that residential mobility outcomes are in part produced by the micro scale interactions between individuals living together in households.

8.3.2 Methodological insights

This thesis also provides methodological insights to enhance future residential mobility research. By consistently demonstrating that many people fail to act in accordance with their previously stated moving desires, all four empirical chapters suggest that both stated and revealed preference methods can only provide somewhat imprecise forecasts of moving behaviour and hence housing demand (Timmermans *et al.*, 1994 for an overview). This is because while many people may state that they value a particular dwelling and hence would like to move there, many of these individuals are likely to subsequently either change their mind or be unable to make this desired move. This in turn means that revealed preference models deriving utility functions from observed moving behaviour may also suffer from considerable bias, as a selective group of people are unable to exercise 'real choice' by moving to their preferred dwelling and location (Brown and King, 2005).

These weaknesses of both stated and revealed preference approaches are likely to be accentuated if the level of constraints faced by the population changes over time, for instance due to macroeconomic fluctuations. In these instances, neither stated nor revealed preference models of migration patterns or housing demand will be sufficient to predict actual moving behaviour. The results from this thesis suggest that this can be remedied through longitudinal analyses which quantify the impacts of various constraints on the desired residential mobility of individuals (chapter seven). More detailed analyses of this topic than were attempted in this thesis could therefore enhance our understanding of population immobility, by developing our understanding of why people do not move even though they may want to (Cooke, 2011; Hanson, 2005). Such work could be of particular importance in the current economic climate.

8.3.3 Policy relevance

Finally, this thesis also has a range of implications for policy. While housing policies have traditionally sought to enable people to choose to move to the places they desire to live in (DCLG, 2011; ODPM, 2005), the results of this study suggest that this individualistic and static conceptualisation of choice is somewhat problematic. While policies seek to mobilise the concept of choice to promote the spatial flexibility of individuals, this study has shown that people frequently choose or are compelled to act against their own interests because of the needs and preferences of other household members (Ferreira and Taylor, 2009). Chapters six and seven have also shown that people frequently change their mind about whether moving is desirable. These results suggest that promoting choice is not necessarily going to produce a more spatially flexible workforce. Many people who could profit from relocation are likely to either not desire to move or not act upon their moving desires for the sake of other members of their household.

This suggests that policy could benefit from viewing immobility as an often positive process which is not just an impediment to the functioning of national economies (Fischer and Malmberg, 2001). All four studies have demonstrated that many people spend a considerable proportion of their life course having no desire to move. While chapters six and seven showed that many people also spend long periods of time harbouring a frustrated moving desire, this may not always be a problem which can be best addressed by facilitating residential mobility. Chapter seven demonstrated that many people who desire to move do not go on to do so because they possess life course ties and commitments, such as partners, children and owned property. That these factors inhibit desired mobility may not be particularly problematic, as these ties and commitments are likely to also provide individuals with substantial benefits (for instance in well-being). Failing to act upon a desire to move may also be beneficial if not everyone in the household wants to move. This may be particularly relevant for children, as frequent mobility in childhood has been shown to detrimentally affect health outcomes (Jelleyman and Spencer, 2008).

We must remain cautious and focus upon the prosperity and well-being of households as well as individuals when evaluating the consequences of unfulfilled moving desires.

In contrast, chapters six and seven showed that disadvantaged groups, such as the poor and social renters, are less likely to fulfil their moving desires. Nevertheless, addressing the restrictions and constraints impeding the mobility of these groups may not always be the most equitable policy response to this problem. This is because many of these people are likely to desire to move to relieve housing and neighbourhood dissatisfaction, as these groups are disproportionately likely to live in the least desirable dwellings in the most deprived neighbourhoods (see chapter four; Kearns and Parkes, 2003; Rabe and Taylor, 2010). While encouraging mobility may be an important way to improve the lives of individuals living in these places, at the broader scale it might be more effective to address the root causes of why people want to leave these areas in the first place. If these root causes are neglected, all that happens is that those individuals who fill the vacancies left by desired out movers subsequently become dissatisfied and the cycle begins again.

These problems could be remedied through what Imbroscio (2012) terms placemaking policies which encourage the regeneration of areas without displacing the residents. Such placemaking policies could improve people's lives without stimulating the residential churn often perceived to have negative consequences for communities (Beatty *et al.*, 2009). Investing in deprived areas to improve the housing, neighbourhood and community conditions will also help tackle the spatial stratification of neighbourhoods by socio-economic status. Fundamentally, it may often be better for policymakers to try and shape people's moving desires, rather than simply respond to them.

8.4 Methodological reflections

This study was motivated by the observation that following people through time can greatly enhance our understanding of mobility decision-making (De Groot,

2011). The research objective and the specific research questions were therefore formulated with this in mind. In consequence, the empirical component of this study was based around the analysis of longitudinal data gathered by the British Household Panel Survey (BHPS). As discussed in chapter three, there were four main reasons why these data were highly suitable for this project. Firstly, the BHPS has gathered data on moving desires and actual moving behaviour from a large sample of individuals tracked for a long time period. As the BHPS interviews sample members annually, only a small time gap separates each survey sweep. Neither primary data collection nor any other British secondary dataset could match the BHPS in these two regards. The exceptional richness of the individual and household data collected by the BHPS at each survey sweep constitutes a third advantage over many other longitudinal resources. Lastly, a key advantage of the BHPS is that it enables analysis of the linked lives of individuals, as all adults in each responding household are eligible to be interviewed at each wave.

Notwithstanding these advantages, it is important to recognise that the use of BHPS data has also imposed constraints upon the research process. These constraints condition what it is possible to conclude from this thesis. The remainder of this chapter will therefore briefly evaluate these constraints (see also section 3.3), before introducing a series of topics and questions which could be profitably addressed by future research in this area.

8.4.1 Data constraints

In common with most studies using prospective panel surveys, the attrition of research participants constituted an important challenge for this thesis. Attrition can pose a serious problem for longitudinal studies if it is selective, as selective attrition means that the panel becomes less representative of the wider population over time (Taris, 2000). Despite the fact that attrition is known to correlate with mobility in the BHPS (Buck, 2000a), there are a number of reasons why this attrition should not severely undermine the conclusions drawn from this study. Importantly, the intensity of the BHPS tracking procedures

means that it is often known whether or not someone who drops out of the panel has also moved (Buck, 2000a). This may explain Rabe and Taylor's (2010) finding that selective attrition does not create severe biases when using the BHPS to study short-term moving behaviour. These considerations imply that the wave-to-wave analyses conducted in chapters four and five are probably not severely affected by selective attrition. For the longer term analyses, imputation (chapter six) and the use of relevant attrition-predictive control variables (chapter seven) were used to mitigate the impacts of selective attrition (Uhrig, 2008). Nevertheless, it is probably best to remain aware that all prospective longitudinal studies are likely to be affected by attrition to some (often unknowable) degree. All findings from this study ought therefore to be interpreted with this caveat in mind.

A second and less significant challenge imposed by the nature of the BHPS data concerned the temporal spacing of the interviews. While the BHPS's annual interview procedure constitutes a major advantage over other longitudinal studies, annual contacts remain suboptimal for the analysis of mobility decision-making and behaviour. This is because unobserved changes in moving desires could easily occur between the expression of a desire (not) to move at *t-1* and the observation of moving behaviour at *t*. As mobility was defined as a change of residence between two waves, it is also impossible to identify people making multiple moves or those who leave then return to the same dwelling within a single year. These issues indicate that the analyses reported in this thesis may occasionally incorrectly classify behaviour to be attitude-discrepant or -consistent.

It is important not to overstate this drawback of the BHPS data. For many people, making moving decisions takes a considerable length of time and hence annual contacts should provide an appropriate means to analyse their decision-making processes (Kan, 1999). This can be clearly seen in the results presented in chapters six and seven, where a substantial number of people are shown to spend long periods of time (not) desiring to move. In addition, it is difficult to more frequently gather data from individuals without becoming intrusive. As people are probably more likely to drop out of panel surveys they

perceive to be intrusive, annual interviews probably provide a good compromise between maximising the detail captured about life course trajectories and minimising attrition rates.

A final constraint imposed by the use of BHPS data was the lack of detail available on how strongly a person desired (not) to move. This constraint arose because data on moving desires were gathered using a dichotomous yes/no question, rather than via a more open Likert scale (as was used for the housing satisfaction question). This reliance upon binary categorisation is likely to produce unobserved heterogeneity amongst people who (do not) desire to move, as some will strongly desire (not) to move while others will be much more equivocal. This unobserved heterogeneity may partially explain why this study has consistently found that many people do not act in accordance with their previously stated moving desires.

While this unobserved heterogeneity constitutes a limitation throughout this thesis, again it is crucial not to overstate its importance. Much of the existing literature follows a very similar approach (for instance Kan, 1999; Kley, 2011; Landale and Guest, 1985; Lu, 1999a; Speare *et al.*, 1975), as binary categorisation provides an effective method to capture the most important distinctions (in this case between those who do and do not desire to move) while simplifying analyses. In addition, the use of moving expectations as an additional independent variable in chapters four and five also probably helps to control for much of the variability in how strongly people desire to move. Nevertheless, it would be valuable if future studies could gather data on people's thoughts about moving using questions which produce ordinal rather than nominal data. Researchers could then make their own choices about how to code and analyse whether people are thinking about moving.

8.5 Future directions and concluding remarks

Despite these constraints, this thesis has fulfilled its objective by enhancing our understanding of how the life course context affects the expression and

realisation of moving desires. Nonetheless, we ought to remain sceptical about Dieleman's claim that "with so much known about residential mobility, one might wonder about the need for more research" (2001: 251). The insights gained from this thesis and the challenges faced while conducting this project suggest a number of profitable directions for future research into how people make moving decisions. These will now be introduced and discussed in turn, before the chapter concludes with some final remarks.

8.5.1 Direct extensions

On a basic level, this thesis could be directly extended in four principal ways. Firstly, future research could focus more deeply upon how the spatio-temporal context conditions the expression and fulfilment of moving desires. While regional and period variables were included in the event history models in chapter seven, further analyses (not shown in the thesis) revealed that these variables had few significant effects on the results obtained in the earlier chapters (hence these variables were not included in the results reported in chapters four and five). This suggests that spatio-temporal variables need to be defined at a fine scale to adequately capture the effects of local labour and housing market conditions on mobility decision-making. This is not possible with BHPS data, as the sample size is too small to permit this level of disaggregation. Hence, analysing the impacts of the spatio-temporal context on mobility decision-making remains an important goal for future research.

Linked to the above discussion, a second pertinent extension of this project could be to assess how the global economic crisis has impacted upon mobility decision-making. This thesis was unable to address this issue, as at the time of writing the necessary panel data are only just becoming available. Assessing the impacts of the economic crisis on mobility decision-making would be timely; as policy, media and public discourse regularly highlight the difficulty of making housing transactions and residential moves in contemporary Britain. Such research is also important as recent economic and housing market trends (for instance elevated unemployment, unprecedentedly low interest rates and

largely static house prices) may mean that the macro context is currently exerting a much greater influence on mobility decision-making than it has for many years. Whether the contemporary labour and housing markets are affecting the realisation of moving desires could be examined using future releases of *Understanding Society*. Analysing the impacts of the recession will however be tricky, as unfortunately the transition from BHPS to *Understanding Society* took place over what is arguably one of the most interesting periods to study (2008-2010).

Thirdly, future research could also unpack whether the links between moving desires and subsequent moving behaviour vary for different types of mobility behaviours conducted within diverse cultural and political-economic contexts. While many authors argue that long distance migration and shorter distance residential mobility are different processes driven by specific sets of motivations (Mulder and Hooimeijer, 1999), this study linked all forms of moving desire to all types of residential relocation. This was a deliberate decision, driven by a growing literature which suggests that there is not a clear-cut distinction between economically motivated migration and short distance moves driven by housing and neighbourhood consumption (Morrison and Clark, 2011; Niedomysl, 2011). In addition, examining all mobility decision-making and all residential moves circumvented the imprecision generated by categorising moves using administrative boundaries or arbitrary distance thresholds (Boyle *et al*., 2009).

Analysing whether different types of moving decision are made in different ways will be a difficult topic for future research and may require the primary collection of prospective longitudinal data. This is because addressing this topic requires data on how far people desire to move, as well as data on how far they actually move. While the BHPS gathers data on the distances over which moves are made, little is known about how far people desire to move. Hence, it is not possible to separate different types of moving desire for people who never act upon their relocation preferences.

Research into different types of mobility decision could also be enhanced by a deeper analysis of the reasons why moving is (not) desired than is possible

using BHPS data. While some studies link the reasons why BHPS respondents desired to move to their subsequent moving behaviour (for instance Böheim and Taylor, 2002), this approach is problematic for a number of reasons. Firstly, investigating the reasons people provide for desiring to move over the course of a wishful spell demonstrates that many people report different reasons for desiring to move over time. In addition, the reasons why people wish to move vary within households and do not necessarily match their retrospective assessments of why they subsequently made a residential move. This suggests that qualitative biographical research may be needed to more deeply investigate how moving decisions motivated by different factors unfold differently over time (Halfacree and Boyle, 1993). As the results of this thesis imply, such research could also profitably explore why people do not desire to move.

Fourthly and as suggested by chapter four, an important task for further research should be to conduct a holistic study of the inter-relations between residential satisfaction, moving desires, moving intentions, moving expectations and actual moving behaviour. While chapter two and the four empirical studies demonstrate that we now possess a well-developed theoretical framework linking these concepts together, no single study has sought to empirically analyse this behavioural process in its full detail (probably due to data constraints). While chapter four arguably makes a substantial contribution in this regard, one of the greatest barriers to our understanding of how people make moving decisions remains the fragmented literature. The proliferation of separate studies conducted in different contexts using varied concepts and heterogeneous methods makes it difficult to identify how well theories of mobility decision-making perform empirically. Conducting a holistic study which addresses this problem would therefore be extremely valuable. Comparative research analysing the mobility decision-making process in different spatio-temporal contexts could also be of great relevance (Dieleman, 2001).

8.5.2 Linking mobility decision-making and social outcomes

Mobility research could also be enhanced more broadly by focusing upon the links between mobility decision-making and social outcomes. While a large literature has explored the links between migration and social mobility (for example Böheim and Taylor, 2007; Fielding, 1992a; Findlay *et al.*, 2009), few studies have explored whether these links are affected by a person's previously expressed moving desires. While making a desired move may produce social mobility (perhaps through higher wages, upward occupational mobility or gains in housing and neighbourhood status), people who are unable to make the moves they desire may be unable to attain these benefits. Given that chapters six and seven highlight that many people spend a considerable period of time harbouring persistently frustrated moving desires, future research needs to explore whether this affects people's social attainment over time. Such research could also contribute to our understanding of neighbourhood stratification by analysing the links between residential moves, social outcomes and neighbourhood dynamics (Hedman, 2011). At the broader scale, such research could also assess the implications of the growing trend towards higher levels of residential rootedness (Cooke, 2011).

Further analyses of mobility decision-making could also develop our understanding of the factors influencing psychological well-being. This is important, given the growing academic interest in well-being (Blanchflower and Oswald, 2008) and the increasing attention being paid within policy circles to devising and analysing a 'happiness index'. As mobility theories typically posit that people seek to move to attain valued goals (De Jong and Fawcett, 1981), it is important to investigate whether attitude-discrepant moving behaviours have negative consequences for well-being (Ferreira and Taylor, 2009). Investigating whether these consequences vary spatially or depending upon the reason why a move is desired would be particularly important when devising the type of placemaking policies discussed in section 8.3.

8.5.3 Enhancing the biographical approach

Finally, the results presented in chapters six and seven reiterate that future mobility research should seek to empirically operationalize the concept of life course biographies (Halfacree and Boyle, 1993). Although Rossi (1955) prioritised this as a goal for future research in *Why Families Move*, surprisingly few studies have attempted to do this. Much more quantitative research is needed to understand how a person's past mobility experiences affect their relocation decision-making and behaviour over the rest of their life course. While some studies have attempted to do this using the concept of 'place experiences' (Feijten *et al.*, 2008; Stovel and Bolan, 2004), it would be valuable to extend this biographical approach more broadly into the quantitative migration literature.

Analyses of mobility biographies could be further enhanced by exploring the long-term relationships *between* the biographies of individuals. This could be particularly valuable for the gendered migration literature. Analysing the long-term inter-relationships between the biographies of partners could, for instance, enable us to investigate whether women are persistently or only temporarily disadvantaged by (un)desired residential (im)mobility (Clark and Davies Withers, 2002). Sequence analysis techniques and event history modelling may be especially useful methods to carry out this type of long-term longitudinal research. Qualitative and particularly ethnographic research could also provide valuable insights into the cultural and emotional dimensions of inter-related life course biographies (McHugh, 2000). While many qualitative studies are conducted at one point in time, the prospective longitudinal approach advocated by this thesis offers exciting possibilities for both quantitative and qualitative analyses of mobility biographies.

8.5.4 Final remarks

In developing our understanding of how people make moving decisions, this study has shown that adopting a longitudinal framework can help to unify the

large and rather disparate mobility literature. Linking moving desires to subsequent moving behaviour helps us to analyse heterogeneous processes of residential (im)mobility using one overarching theoretical framework informed by life course and structuration theories (Halfacree and Boyle, 1993; Mulder and Hooimeijer, 1999). While this study has taken a small step towards this elusive goal, continuing to develop and test comprehensive theories of why families (do not) move remains an important agenda for mobility researchers.

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Appendix A: Letter of ethical approval

27 January 2011
Maarten van Ham
Geography and Geosciences

Ethics Reference No:	**GG7195**
Project Title:	A longitudinal analysis of residential mobility in the UK: Linking moving desires to subsequent moving behaviour
Researchers Name(s):	Rory Coulter
Supervisor(s):	Maarten van Ham

Thank you for submitting your application which was considered by the Geography and Geosciences School Ethics Committee. The following documents were reviewed:

1. Ethical Application Form 26 January 2011
2. BHPS End User Licence Agreement 26 January 2011

The University Teaching and Research Ethics Committee (UTREC) approves this study from an ethical point of view. Please note that where approval is given by a School Ethics Committee that committee is part of UTREC and is delegated to act for UTREC.

Approval is given for three years. Projects, which have not commenced within two years of original approval, must be re-submitted to your School Ethics Committee.

You must inform your School Ethics Committee when the research has been completed. If you are unable to complete your research within the 3 three year validation period, you will be required to write to your School Ethics Committee and to UTREC (where approval was given by UTREC) to request an extension or you will need to re-apply.

Any serious adverse events or significant change which occurs in connection with this study and/or which may alter its ethical consideration, must be reported immediately to the School Ethics Committee, and an Ethical Amendment Form submitted where appropriate.

Approval is given on the understanding that the 'Guidelines for Ethical Research Practice' (http://www.st-andrews.ac.uk/media/UTRECguidelines%20Feb%2008.pdf) are adhered to.

Yours sincerely,

Dr. Sharon Leahy
Convenor of the School Ethics Committee

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